

# Rabbit Husbandry

## Part 4:

## Ways to reduce fear and distress

by Emma Magnus



A DEFINITION OF WELFARE varies from person to person – from the feeling that the animal's needs are being met adequately through space, regular feeding and a water supply through to the interest in the animal being able to perform natural behaviours.

My favourite definition is "The welfare of an individual is its state as regards its attempts to cope with its environment" (Professor Donald Broom).

Of course, a compromise is often reached between the needs of the animal and the abilities of the owner but a realistic assessment of what space, resources and time you can give to keeping rabbits is fundamental to preventing welfare problems.

Behaviour is often a reliable indicator of welfare as the animal modifies its response to enable them to cope with the situations that they find themselves in.

Whilst it is very easy to make assumptions on the welfare of an animal using our emotions, assessing welfare adequately should be based on a thorough understanding of the behaviour and physiology of the animal in question.

When I was at college I remember a story of a zoo that removed the bars on some of the animal's cages as visitors felt that seeing the animals 'caged in' was distressing and assumed that this must have been causing problems for the captives.

Once they removed the bars, though, they recorded a significant increase in stress-related behaviours in the animals that had the new enclosures. This was attributed to the apparent removal of any barrier between the animals and the visitors. Once the cage bars were reinstated the behaviour returned to normal.

There are plenty of books covering the natural behaviour and physiology of rabbits in sufficient depth to be of benefit to any discussion on welfare, I have listed a few at the end.

### The Five Freedoms

In 1966, the Brambell Report suggested that farm animals should be given certain freedoms; these five freedoms have been promoted by the Farm Animal Welfare Council (FAWC) and provide the criteria for the RSPCA's Freedom Food logo as well as being the basis of the Duty of Care component of the Animal Welfare Act.

Most importantly, they offer an easy guide for owners of any animals as they can be placed alongside knowledge of the natural behaviour and physiology.

### The Five Freedoms are –

**Freedom from hunger and thirst:** provide ready access to fresh water and a diet that maintains full health and vigour.

**Freedom from discomfort:** provide an appropriate environment including shelter and a comfortable resting area.

**Freedom from pain, injury or disease:** prevention or rapid diagnosis and treatment.

**Freedom to express normal behaviour:** provide sufficient space, proper facilities and company of the animal's own kind.

**Freedom from fear:** ensure conditions and treatment that avoid mental suffering.

From a behavioural point of view, although it is important to prevent discomfort by providing adequate space for rabbits within hutches and show pens the areas of most use for improving the welfare of rabbits are a freedom to express normal behaviour and a freedom from fear.

Listed below are a few examples, there are undoubtedly plenty more!

### A freedom to express normal behaviour

- Rabbits should be given continual access to vegetable matter, ideally hay or grass, to enable them to graze and have access to fresh water throughout the day.
- It is a British Rabbit Council show rule that rabbits have access to water at shows. It is also advisable to give them some hay in the pen so that they have something to keep them occupied.
- Overweight rabbits are unable to clean themselves, feed properly and are at risk from numerous health problems, many fatal.
- A hutch should give enough space for the rabbit to be able to move around freely, stand on their back legs and take two or three hops in any given direction.
- Rabbits should be given regular exercise, in an enclosed run or on the floor of a shed.
- Rabbits require regular social contact, preferably with a member of their own species.
- When rabbits are due to give birth they should be left alone. Other people and animals should also be kept away from the hutch.

- The use of nest boxes or removing the doe from the hutch for short periods of time once the kits are born will enable her to exhibit normal parenting behaviour.

### A freedom from fear

- Rabbits should be housed in an environment that keeps them safe from predators.
- Housing should be located in a cool and quiet area of the home or garden.
- Rabbits should be accustomed to travelling in a car before their first show
- If rabbits are handled in a way that makes them feel safe then they are less likely to feel fearful or injure themselves by struggling (rabbits that are handled regularly when they are young and throughout early adulthood are less likely to develop into rabbits that are scared of people).
- Although non-breeding rabbits should live with another rabbit, they should be separated if they are being bullied or injured during fights.
- Rabbits must be supervised every time they are with the pet dog or cat as well as small children.
- Rabbits should not be punished, especially for behaviours such as aggression, which are usually caused by fear.

### Trancing rabbits

Rabbits can be put into a trance-like state when they are laid on their backs. This is widely used in veterinary practice for minor procedures and by breeders and owners alike to aid in the removal of leg rings, to check nails and teeth or even as a party-piece.

When the rabbit is in a 'trance' it is in a state known as tonic immobility that is fear-driven and evolved as a defence against predators – the predator may lose interest if the prey appears to be dead. In a domestic situation, some rabbits may be saved from the interest of the pet dog if they induce tonic immobility.

Studies have shown that physical indicators of stress, such as elevations in respiration, heart rate and plasma corticosterone, were recorded following tonic immobility (the body releases plasma corticosterone to reduce the effects of stress).

Behaviours associated with fear, such as wide eyes, flattened ears, over-struggling and increased tension in the muscles, were also recorded as the rabbit was put into a trance. Following the trance, the rabbits showed increased levels of grooming and hiding behaviours. The conclusion of a study by McBride et al was that the recorded physiological and behavioural responses of rabbits to tonic immobility indicated a stress state.

Although tonic immobility is part of the rabbit's repertoire of natural behaviour, there is concern over the use of tonic immobility at times when good handling or husbandry would suffice. Its use as a 'trick' is of particular welfare concern.

## Stress

The term stress is often used to cover a range of human feelings but the correct use is to describe a situation in which environmental conditions are having an adverse effect on an individual.

Stress is therefore a state, the environmental factors that lead to stress are stressors and the individuals under stress show stress responses.

There are many factors that influence the response of an individual to stress; these include previous experience and/or familiarity of the stressor, genetic predisposition and individual susceptibility.

Stressful situations are usually associated with a lack of control and can be particularly severe if the individual is unable to predict events.

The most stressful situations for animals are often those that would be most diligently avoided in the wild – this consideration is of paramount importance to the rabbit, a prey animal.



## Examples of stressors that may affect rabbits:

- **Novelty** – examples include the first trip in a car, the first visit to a show, handling by a "stranger"
- **Fear inducing stimuli** – examples include sudden noises, other animals or poor handling
- **Social stress** – examples include a lack of social contact or interactions with many individuals in a limited space
- **Inability to perform normal behaviour patterns** – examples include a lack of social contact, exercise or an inability to retreat from a stressor
- **Pain, discomfort or illness**
- **Anticipation of pain or discomfort** – examples include poor or excessive handling
- **Inability to control environmental factors** – examples include poor ventilation, temperatures at shows, travelling in a car on a hot day, and poorly lit shed
- **Lack of space** – examples include hutches, indoor cages and show pens
- **Withdrawal of food or water**

## Behaviour pattern occurring in response to various stressors:

- **Fear related behaviour** – As a prey species, rabbits are likely to freeze when a fear-inducing stimulus is encountered. This may be associated with a decrease in heart rate and an increase in rapid breathing. If they have space, rabbits will also try to hide or flee from the stressor. If there appears little option they will use aggression. Occasionally displacement activities are used to deal with stress – for example chewing of novel items.

- **Anxiety related behaviour** – anxiety lasts longer than fear and is usually associated with anticipation of an event or interaction. Behavioural signs include jumpiness, frequent urination and defecation.
- **Behaviour pattern due to frustration** – barren environments are associated with abnormal behaviour patterns such as excessive destruction, over-grooming and self directed aggression.
- **Behaviour patterns due to position in social order** – where rabbits are living in groups but have limited space and reduced access to food and water certain animals may become the target of aggression from other individuals.
- **Separation behaviour** – female rabbits and youngsters may display an increase in apathy and a decrease in social behaviours associated with the suddenness of weaning.
- **Apathy or 'depressed' behaviour** – rabbits in barren environments with no social contact can appear relatively unresponsive or lethargic.

Emma Magnus BSc (Hons) MSc is a member of the Association of Pet Behaviour Counsellors having qualified with a degree in Zoology and a Masters degree in Applied Animal Behaviour and Animal Welfare.

Emma was one of the first in the profession to attain Certification in the UK as a Clinical Animal Behaviourist (CCAB). She has lectured at APBC conferences, BSAVA and run CPD courses through veterinary practices and is a member of the *Fur & Feather* editorial team.



## Further reading

**Why Does My Rabbit ..?** Dr Anne McBride (Souvenir Press) *Fur & Feather Bookshop*, £11.49.

**Rabbits and Hares** by Dr Anne McBride (Whittet Books) *Fur & Feather Bookshop*, £11.50.

**Keeping a Rabbit** by Emma Magnus (Hodder Education) *Fur & Feather Bookshop*, £10.50.

**Rabbits: Health, Husbandry and Diseases** by Virginia Richardson MRCVS (Blackwell Science) *Fur & Feather Bookshop*, £30.00.

**Domestic Animal Behaviour and Welfare** by D M Broom and A F Fraser (CABI Publishing, ISBN 978-1845932879)

## Further information

The British Rabbit Council (BRC) publishes their Codes of Practice within their annual yearbook. They also have a range of leaflets on animal housing, feeding and general care. These are free of charge and can be obtained by contacting the BRC on 01636 676042 or e mailing [info@thebrc.org](mailto:info@thebrc.org).



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