

Summary: Pet rabbit housing conditions and their welfare in the Netherlands

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Rabbits are a common pet animal in the Netherlands. In 2005 there were 0.98 million rabbits, which makes it the third most kept pet mammal after the cat and dog. There is little legislation in place in the Netherlands to ensure that pet rabbit's welfare is guarded. Neither has there been much research to the housing conditions and behaviour of pet rabbits. The aim of this study was to determine the housing conditions of pet rabbits in Dutch households and to assess their behaviour and welfare. The study comprised of two parts; a survey and behaviour observations.

A survey was placed on the internet with questions regarding the rabbits housing systems, general care given to the rabbits and behaviour of the rabbits. The survey has been filled out by 1025 people of which 919 entries were used for analyses. The survey revealed that the average age of the rabbits is three years old, while they can become eight to twelve years old. This means that the welfare of the pet rabbits in the Netherlands is impaired. The survey also gave some insight in the possible reasons behind this low age.

1. About half of the people house their rabbit(s) solitary, while studies show that rabbits are group animals and should be housed together.
2. The majority of people with rabbits is housing them in a system which is too small according to the standards of NGO's located in the Netherlands and the UK.
3. Since many rabbits do not have a large permanent run available and also do not get to walk around free very often, many rabbits do not get enough exercise. However people who let their rabbit(s) run free once a day or more often, usually also let them run free for some hours per session.
4. A number of rabbit owners do not give their rabbits feed that belongs in a rabbit's diet, or do give feed that does not belong in a rabbit's diet.
5. Some people (12%) clean their rabbit's housing system less than once a week, which can cause hygienic problems.
6. Only half of the people inoculate their rabbits against myxomatosis and rabbit haemorrhagic disease, which are deadly rabbit diseases.
7. Many people do not give their rabbits items in their housing system and/or area in which the rabbits sometimes run free to provide them with basic needs so they can perform natural behaviour. However on average indoor rabbits have more items at their disposal than outdoor rabbits, except for sand and plants.
8. Some rabbits are living in fear of other animals (cats (15%) and/or dogs (20%)) or people (adults (9%) and/or children (11%)), which causes fear and distress.
9. Only one fourth of the people lifts their rabbit up in safe way. The unsafe lifting of rabbits can lead to accidents which could be fatal for the rabbit.

The second part of this study comprised of behaviour observations of rabbits living under different circumstances. In total 90 rabbits were observed at people's homes. The rabbits were observed during two different fear tests, an open field test and while being in their own housing system.

The first fear test turned out to be a test for attention (observer placed her hand against the rabbit's housing systems and noted the times the rabbits touched or sniffed her hand). The results show that solitary housed rabbits want more attention than rabbits housed together. Hence it is better to house rabbits as a duo or a trio than solitary. Furthermore rabbits in a small housing system also wanted more attention than rabbits in a medium or large housing system (they possibly wanted to be let out of the housing system).

The second fear test (the observer lifted the rabbits up and noted how much they struggled) showed that nearly one fourth of the rabbits is afraid of being picked up by an unknown human. This indicates that these rabbits have not been socialised as much as the other rabbits. This could impair their welfare, since animals should be free from fear and distress.

The one hour of focal sampling of the rabbits in their housing system showed that the average time budget of the observed rabbits differs very much from the natural behaviour of domestic rabbits in a natural enclosure. However the pet rabbits do have a better welfare than the rabbits observed by Gun and Morton (1995) in standard laboratory cages. Furthermore, the results show that rabbits exhibit more natural behaviour in certain housing systems than others. The welfare of solitary rabbits is more impaired than that of rabbits housed in groups; they showed more stereotypical behaviour and could not perform social behaviour. Furthermore rabbits perform more natural behaviour in a large than a small housing system, more locomotory (hoping and running) and exploration (rearing) behaviour and less stereotypical (nosing) and comfort (stretching) behaviour. Also rabbits living outdoor are showing less inactivity (lie alert) than rabbits living indoor.

The results from the open field test indicate that rabbits that live outdoor are less afraid in the open field than rabbits that live indoor. This might have something to do with the fact that indoor rabbits live in a rather stable environment and outdoor rabbits experience more changes in their environment.

Some recommendations can be made to make the welfare of rabbits better. It is recommended to house rabbits together in a large housing system in which they have a lot of space to stretch their legs. The housing system should also give the rabbits the opportunity to perform natural behaviour like digging, hiding and chewing, hence it is advisable to enhance the housing system with items like a sandbox, tunnels, hiding places, cardboard and wooden objects to chew in etc. Preferably this housing system is outdoor, but if rabbits get enough stimulation indoor housing should not be a problem.

Furthermore the rabbits should be socialised with respect to humans but also to other animals if these are in the household to minimise the rabbits fear and distress level. Also, when lifted rabbits should be lifted up in a safe way (by the scruff of the neck while supporting the posterior) to prevent extra fear and accidents.

In addition to this rabbits should receive feed that belongs in a rabbit's diet. This means hay and vegetables (only if the rabbit has no problems with digesting the vegetables) on a daily basis, completed with some pelleted feed. Fattening treats like bread, so called rabbit treats from pet shops, and human snacks should not be given, to prevent obesity and the problems that obesity causes.

Besides these things the rabbits' housing system should be cleaned at least once a week and rabbits should get yearly inoculations against the diseases myxomatosis and rabbit haemorrhagic disease.