

Consideration of Animal Protection and Welfare
in Domestic Rabbit Housing and Management

Necessity of worldwide harmonizing for animal welfare regulations in
domestic rabbit housing and production.

by

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The modern industrial farming of animals for production of food and clothings - wool, fur, leather - has intensified the discussion about animal welfare and protection kept under responsibility of men. In numerous countries laws for animal protection and welfare are issued, frequently completed by legal regulation about the limitative conditions in housing and transportation of domestic animals. But there are also demands by animal welfare organisations of those countries, to exclude animals and their products, originated in states without comparable welfare regulations, from the international import, export and transit traffic. The commission of the European community (EC) has issued several recommendations and regulations about welfare and protection in housing and transportation of various domestic animals, obligatory for all member states, who have to harmonize their national regulations with those of the EC.

Occasionally of the last International World Rabbit Science Congress in Budapest, 1988, staff members of the WRSA agreed to develop fundamental suggestions on animal protection and welfare in housing and management of domestic rabbits. The idea of these suggestions is, to demonstrate the essential principles in rabbit farming and its possibilities and borders to the rabbit farmers and breeders worldwide, but also to stimulate the development and improvement of animal welfare appropriate housing systems and management. Furthermore, it may be helpful in the issue of meaningful and practical effective legal regulations by national authorities about welfare conforming housing and management of domestic rabbits, harmonized and therefore comparably with similar decrees in all states.

The referee of these suggestion was charged by the WRSA board to elaborate appropriate recommendations in cooperation with the German group of the WRSA, which are presented in the enclosure.

World Rabbit Science Association
German Group

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Suggestions on Appropriate Domestic Rabbit Management
In Conformance with Animal-Protection Considerations

The following suggestions on appropriate and safe rearing methods for the domestic rabbit were drafted and compiled by executive committee members of the World Rabbit Science Association (WRSA), together with agricultural rabbit producers, breeders of purebred animals and researchers in the fields of biology, veterinary medicine and animal production in Germany. They are intended as general guidelines to be made available to holders and breeders of rabbits worldwide, to promote husbandry conditions which are appropriate to the needs of the species "rabbit" and in line with animal-protection considerations. Detailed measures and limiting figures have, with few exceptions, been intentionally left out of these suggestions, to avoid restricting the criteria to the present state of knowledge. This will allow new experiences gained through management practice or scientific investigations to be taken into future account. Therefore each rabbit holder is reminded of his responsibility to keep abreast of relevant scientific and practice-oriented advances. Appropriate and protective rabbit production methods are also essential to reduce losses and ensure that breeding and production ventures are economical.

Species Description and Management Forms

The following suggestions apply to domesticated breeds and cross-breeds of the European rabbit, *Oryctolagus cuniculus* L., including possible *Oryctolagus* crossbreeds with other species of the hare family (Leporidae). Domestic rabbits are kept and bred as a hobby, for economic reasons or for scientific investigations. They are mainly or entirely dependent upon the conditions created and maintained for them by humans for their housing, care and protection from inclement weather and natural enemies.

Domestic rabbits are now raised in numerous countries and widely varying climatic zones around the world. Even their free-living wild form, the European wild rabbit, lives far beyond its historical home (Spain, Northwest Africa). This rapid global expansion of domestic and wild rabbits, taking place only within the past two centuries, is an indication of the great adjustability of the species *Oryctolagus* and its numerous domestic breeds. Rabbits have been reared in cages or other closed areas since the Middle Ages. Being confined to a limited space over generations has not caused degenerative damage or disturbed their typical and essential physiological functions. This management form has, however, especially suited the rabbit as a source of meat, wool and skins for population groups living under economically weak and spatially limited conditions.

Criteria of a Management Form which is Appropriate for the Species and Protects the Animals

Appropriate living conditions for a particular domestic species are those which fulfill the necessary - essential - requirements for normal development and function of the animal body and organs.

The appropriateness of the housing, care and supervision provided for the rabbit by humans may be measured by a lack of bodily injury, a normal state of development and nutrition for the age and sex, and a healthy condition.

A healthy, undamaged rabbit is evidence that

- its nutrition and care are suitable and fulfill its needs;
- its essential spatial needs are met and it is not injured directly or indirectly by the housing form or material;
- it does not suffer pain, injury or discomfort which impair the function of its organs or extremities in a clinically visible manner;
- its own resistance mechanisms and systems are capable of equalizing, resisting and overcoming any environmental stress or pollutants affecting its body.

Animal-protection considerations are met when

- the physical development and health of the animals correspond to the age, sex and breed traits;
- any injuries or pain suffered by the animals are definitely not caused by negligence related to housing, care or supervision of the stock.

Animal-protection considerations are not met when

- the animals suffer injuries, pain or discomfort which, with minor exceptions, are avoidable when proper care is given to animal housing, nutrition and supervision, including specific health treatments through authorized prophylactic inoculations and drugs.

Suggestions of Appropriate Management Methods for Rabbits

Specialized knowledge: It is the responsibility of anyone keeping rabbits for economic reasons (use of meat, wool and skins, breeding of experimental animals), for purebred breeding or for scientific investigation to acquire the necessary basic knowledge on rabbit husbandry, nutrition and supervision. This also applies to the construction and maintenance of housing and supply facilities. He should become sufficiently informed in theory and practice and continually update this knowledge.

Animal Care:

- The feed and water supply must be sufficient and fulfill the requirements of hygiene and nutritional physiology. Feed and water intakes should be monitored.
- Feeding and drinking equipment, as well as cages or animal pens (or compartments) should be cleaned and disinfected as necessary, and always before introducing new animals.

- The rabbits' physical condition (general health, injuries) should be monitored daily. If wounds or suspicious symptoms of disease are determined, suitable measures must be taken without delay, if necessary with the help of a veterinarian. If the threat of disease exists, animal care should also include specific prophylactic measures, such as inoculations and drug treatments, in addition to the necessary hygienic measures (quarantine, disinfection, cleaning, etc.).

Housing: Any form of housing is suitable for rabbits which

- allows the animals to be kept on a long-term basis without the risk of bodily injury or disease;
- ensures a sufficient supply of the proper feed and water;
- enables the easy and effective removal of excrement, leftover feed and other potentially damaging substances (dust, toxic gas);
- provides the animals with sufficient protection against inclement weather and natural enemies;
- permits the animals to be introduced easily and removed without risking injury.

Any housing system for rabbits should facilitate regular monitoring and care of the animals.

Rearing without bedding is problem-free in cages with properly designed floors, which allow the faeces and urine to fall through, but do not cause injuries. The animals should not be able to step through or catch themselves in the openings, there should be no sharp edges and the supporting surfaces must be large enough. The material of the cage floor should be easy to clean and disinfect. Rearing without bedding is much more hygienic and decreases the risk of infection via contaminated excrement (intestinal coccidia, worms and bacteria), while simultaneously reducing the necessity for prophylactic and therapeutic drugs (coccidiostatics).

When rearing in cages without bedding, breeding does must have access to nest boxes made of a material which is easy to clean and disinfect. The nest bedding should be absorbent and soft, and not present a hazard to the young.

The cages or pens (compartments, boxes) in which rabbits are kept on a long-term basis should be so constructed that the animals can find a draft-free resting place. Animals of only one age group should be kept together in a cage or compartment (pen, box). Male animals should be transferred to single cages when they become sexually mature.

When cages or pens are outdoors (open hutch management), it must be possible to protect the animals against the cold by installing protective boxes (e.g. nest boxes) or sufficient bedding. Angora rabbits are especially sensitive to the cold for 14 days after shearing, and must therefore be protected accordingly, if necessary by temporarily housing them in closed and heatable pens or boxes.

Indoor pens require regular ventilation - introduction of fresh air, removal of used air containing toxic gases (CO₂, ammonia) and dust. For long periods (more than six hours), air concentrations of CO₂ and ammonia (NH₃) should not exceed 3500 and 20 ppm, respectively. It should be possible to regulate the room temperature to meet the animals' requirements. The lighting should not hinder the animals' feed intake and natural activity needs (age-dependent), while at the same time ensuring that they can get enough rest.

Stock Monitoring

The health of all the animals should be checked regularly. Noticeably ill animals should either be painlessly killed or given treatment. The health problem and its causes should be identified, if necessary through a veterinary examination, and the extent of the damage and number of losses should be recorded (in the stock book).

The construction and function of the rabbit pens and all equipment used to supply and house the animals and dispose of wastes should be regularly checked and maintained, and when necessary replaced or repaired. All facilities and equipment should also be cleaned regularly and disinfected when required. Feed storage facilities and equipment should also be included in the monitoring, cleaning and maintenance programme.

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S p a c e a l l o w a n c e s
for rabbit housing

	Minimum	
	Floorspace per animal	High
	m ²	cm
Adult does and bucks		
for breeding		
till 4.0 kg live weight	0.20	35
till 5.5 kg live weight	0.30	40
more than 5.5 kg live weight	0.40	40
 Fattening rabbits		
a Cage housing		
(weaning - 6. weeks old)	0.04	35
(till 3,3 kg liveweight)	0.08	35
b. Floor housing (p.e. deep litter)	0.12	
Angorarabbit-Woolproduction	0.25	40
Litter box	0.10	30
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Cage floors		
minimum diameter of wire	2.5-3.0 mm	