OUTLINE OF RECOMMENDATIONS FOR APPROPRIATE DOMESTIC RABBIT MANAGEMENT IN ACCORDANCE WITH ANIMAL PROTECTION AND WELFARE CONSIDERATIONS

LÖLIGER H. CH.

Chairman of WRSA Commission on Rabbit welfare

WRSA German Branch, Neu Ulrichstein, 35315 HOMBERG/OHM - Germany

INTRODUCTION

The following recommendations on animal species appropriate management in housing and care for domestic rabbits, kept under supervision and responsibility of humans were drafted and compiled by executive members of the World Rabbit Science Association (WRSA) in connection with international agreed specialists in practice and science of breeding and management, biology and pathology of rabbits including rabbit diseases control. recommendations shall be the general and world-wide competent guideline for correct rabbit housing and care in regard of the appreciated rules of animal welfare and protection against cruelties.

With few exceptions detailed measures and limiting figures have intentionally left out of these general suggestions to avoid the restriction of criterias at the present stage of knowledge and to be open for new experiences by advancing researches.

Definition of species, domestication and reason of rabbit housing.

The following suggestions apply to breeding and farming of domesticated European rabbits, offsprings of the wild living *Oryctolagus cuniculus* from the Leporidae family, and its related pure-bred and crossbred species. Domesticated rabbits are kept life-long under farm conditions, depending exclusively on the care by humans in housing, feeding and protection against different natural adversities (climatic conditions, microbial and dust pollution, aggressions by pen mates etc...

Domesticated rabbits are used for different reasons as pet-animals, for fancy or race breeding, for meat, wool, hair and fur production and as laboratory animals.

Domestication and Expansion of the European Rabbit

The historic home of wild living European Rabbit are the Iberian peninsula, Baleares islands and the Northwest regions of Africa. Spreading and domestication of these rabbits starts at time of the late Roman Empire and was continued, particularly, by early Christian monasteries in the Western and Southern European countries. First reports about cage housing of rabbits are delivered from the late Middle Ages. Also the global expansion of rabbits took place in this Middle Ages period, favoured by the transcontinental and intercontinental explorations and trade, when encaged rabbits were used as living meat supply on the journey. Today, European rabbits are living world-wide in different geographic zones as well as under wild life and domesticated conditions. In review of the centennial old domestication of rabbits and its housing under mobility limiting conditions in cages or boxes there are no evidences for the development of housing dependent, genetical manifested malformations of the body or disorders of organ functions by long-time housing in cages or boxes per se.

Animal welfare appropriated management at rabbit farming.

General Rules

Every one keeping rabbits in the above named reason is responsible for the health and uninjuriousness of the animals. Farmed rabbits have to be supplied sufficiently with all life-essentials (feedstuffs, fluids, fresh air) in species appropriated and hygienic unobjectionable quantity and quality. The health and uninjuriousness of animals has to be promoted in every suitable way and controlled regularly. The housing systems for rabbits must

guarantee their protection against climatic adversities and natural enemies, but also exclude technical-born or behavioural damages of body and body parts.

Criteria for Animal Welfare conform Farming of Domestic Rabbits

The health condition of farmed rabbits and the physical and functional uninjuriousness of their body, bodyparts, organs and organsystems are the most sensitive criteria of its welfare conform and species appropriated housing, feeding and care.

Appropriate life conditions for domestic rabbits are those satisfying the essential requirements for physical development and supporting of the functions of body, organs and organsystems, which are the basis of health and reproduction ability and the presupposition for the preservation of the rabbit species.

The health of the rabbit is appeared by

- undisturbed development and growing of body, organs and organsystems of animals corresponding to species and race specific nature and its undisturbed physical and physiological function in regard to age and sex of animals,
- undisturbed function of all body-parts, organs and organ-systems, recognisable on its sensorial perception, mobility and reactivity, feed uptake and digestion, quality of its excrements and secrets, and in the ability for reproduction,
- adaptability of animals to varying environment situations without continuing disturbances of physiological functions or essential behaviour properties,
- reactive capability of immune system and tissue regenerative activity to overcome stress, injuries and other (infective, toxic, climatic, traumatic) adversities, commonly occurring in course of animal life.

The physical normal developed, healthy and unhurted rabbit, at maturity also capable for mating and (if females) for litter rear-up, gives proof for:

- sufficient nutrition in species appropriated quantity and quality, satisfying the requirement of all essential foodstuffs,
- appropriate housing of animals, that not injure the species typical development and function of body, body-parts, organs and organ-systems or impair the accomplishment essentials and the regeneration and immune activities to overcome the common, natural adversities (infectious contacts, superficial hurts etc...)
- careful attendance of animals and its housing and effective health precaution.

Disease prevention

Diseases or damages of different kind and origin may occur as single cases or accumulated and spreaded

among rabbit stocks. Its occurring is favoured with increasing number of animals per roan (livestock density) and technical equipment of the units.

Therefore, the regular execution of appropriated technical and hygienic measurements, if necessary completed by official registered special drugs (vaccinations, drug-prophylaxis) belongs to the indispensable obligations of animal welfare conform farming to prevent or minimise the outbreaks of maladies and occurring of damages among the farmed rabbits, i.e., behaviour discomfort, technopathies, climatic injuries, parasitic and infectious diseases.

Suggestions of appropriate management

Basic knowledge in rabbits biology, its housing, nutrition and health precaution:

Everyone keeping rabbits must have sufficient actual knowledge in theory and practice about :

- the biology of rabbits, including reproduction and litter (offsprings) rearing,
- the requirements on nutrition (quantity, essential nutrients, feedstuff compound) and for recognition indigestible and spoiled material within the feed,
- the claim of rabbits to housing, in regard to age and life conditions (growing, pregnancy, lactation or production performance) and to the actual climatic and environmental situations.
- general and special measurements for health precaution and disease prevention.

Actual knowledge include also its continuous updating by reading special literature and/or participation on special lectures.

Animal care

The care for enhoused rabbits includes

- its regular feeding with balanced, species essential, nutritive materials in sufficient quantities and digestible form and in hygienic unobjectionable quality:
- the offer of sufficient liquid (water, fresh greenfeed), according to the actual requirement by physiological (pregnancy, lactation) or climatic conditions and by feed consistence (all-mash, drymatter)
 - regular monitoring of feed and water uptake,
- regular control of the rabbit units including its technical equipment (feeder and drinker, ventilation, devasting) on its unobjectionable construction and functions and its clean and hygienic conditions. In case of disturbances or damages at the construction and equipment they are to remove immediately,
- daily monitoring of the physical condition of all rabbits; in cases of health disorders by hurts or maladies or at suspicion on its therapeutic measures must be started immediately, if necessary by consulting veterinarians,

- registration of special events among the stock, recording the losses with date, number, age and sex of dead animals, diagnosis and treatments.

The institution of separated quarantine rooms for transient lodging of animals from outside is recommended urgently particular for breeding units and laboratory stocks.

Housing

Any form of housing (enclosure keeping, conventional hutches, boxes, battery-cages) is suitable for rabbits which

- allows the animals to be kept on a long-term basis without the risk of bodily injuries or diseases.
- ensures a sufficient supply with incontestable feed and water and the uncomplicated feed and water uptake for each animal within the compartments,
- enables the regular and effective roomventilation (air-exchange) and the removal of manure, offals, dust and toxic gases (ammonium, carbondioxide) from compartments,
- protected effectively the animals against inclemencies of wrong climatic influences (cooling, heating, wetting) and against hurting attacks by aggressive pen-mates or natural carnivore enemies.
- enables to bring in and to catch the animals within the compartment (cage, hutch, box) or to remove them from the cages/boxes without risks of body injuries,
- allows to observe and care all rabbits, that lodged in.

CONCLUSIONS

Animal welfare conform rabbit farming supports the healthy development and stage of the enhoused animals and, therefore, corresponds to the requests of each branch of rabbit farming. But despite correct care of animals the spontaneous occur of diseases, injuries and accidents among rabbits connected with varying mortality can not be avoided generally and its occurring are not always related to animal welfare adverse housing and careless. The conscientious attendance of the farmed rabbits corresponding to the general welfare rules helps to prevent avoidable injuries and reduce in general the risks of damages and losses among the farmed rabbits. Finally, it supports also the careful rabbit breeder in the defend against unjustified reproaches of welfare adverse animal housing

The animal protection considerations are met, when the overwhelming number of farmed rabbits occurs in health and undamaged condition, when injuries, maladies or pains, suffered by the animals, are definitely not caused by doubtful negligence in housing, feeding, care or supervision of the rabbit-stock.

The animal protection considerations are not met, when rabbits suffer health disorders (by diseases, injuries, pain or discomfort), that would be avoidable by:

- careful attending of animals, its housing, nutrition and essential requirements,
- suitable health precautions by general hygienic and appropriated prophylactic or therapeutic measurements including special disease prevention (vaccinations, coccidiostatic medication).

Health and health disorders as well as physical injuries in rabbits can be stated objectively by veterinary clinical investigations. In case of diseases or other disturbances among the rabbit stock, the statement of its causes and origin as well as the proof of its unavoidability or avoidability should be given as result of objective clinical investigations by experts.