# REGULATING POPULATIONS OF SYNANTHROPIC VERTEBRATES IN THE CZECH REPUBLIC

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**Abstract** - At the National Reference Laboratory for Insect and Rodent Control at the National Institute of Public Health, there have been elaborated three methodical instructions concerning the regulation of populations of synanthropic rodents, feral cats, and urban pigeons. Up to the time of their publication many a pest control intervention ended in encounters with activists from animal protection organizations. Since the enforcement of the methodical instructions in practice, requirements for regulation the numbers of pigeons in cities have increased three times and in other case of feral cats five times. Statistics relate to over 1,000 registered interventions. The present contribution presents the main principles and requirements in each of the methodical instructions. **Key words** - Rodents, feral cats, pigeons, regulations

#### INTRODUCTION

The urban environment is attractive to many animal species, namely for its greater food supply, absence of predators, as well as for its microclimatic conditions. All these deviations from conditions in the wild usually contribute to an increased population density in some species. Such disproportionate concentrations are usually connected not only with considerable economic losses but also with health hazards to man following from the synanthropic lifestyle of certain species. For instance, feral cats in food manufacturing plants and storage houses, in children's playgrounds, etc. In recent years we are witnessing the synanthropization of the stone marten which often raises its young in attics of dwellings and not infrequently damages the electric circuits in parked automobiles. Some cities regularly suffer from mass seasonal intrusions by rooks. Flocks numbering several hundreds roost in trees and on roofs and contaminate the environment with droppings to such a degree that, e.g. the hanging of laundry to dry in the backyard is rendered impossible; sandpits become unfit for children; etc. Limiting the numbers of such species in specific localities is sometimes inevitable. In the past we have attempted to point to this situation and to resolve it at least in part (Rödl 1992, 1995, 1996a, 1996b; Rödl *et al.*, 1995, 1996).

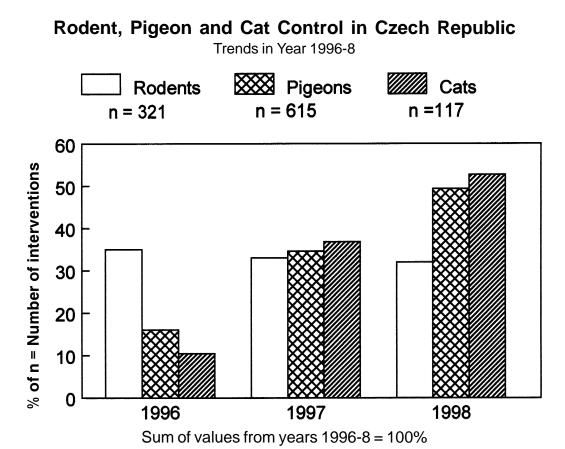
Organs of the public health service of the Czech Republic can order such activities on the basis of art. 23 of regulation No. 91/1984 Dig. On measures against communicable diseases. Since 1992 there is in force law No. 246/1992 Dig. On the protection of animals against cruelty, to which all regulatory interventions must be subordinated. In as during some campaigns against urban pigeons and feral cats there occurred clashes with animal protection organs, there have gradually been elaborated three methodical instructions by the National Reference Laboratory for Insect and Rodent Control at the National Institute of Public Health, concerning rodent control, feral cats, and urban pigeons.

# **RESULTS**

The first one was announced by the Chief Public Health Officer of the Czech Republic in 1994 as Standard Methods of Public Health Rodent Control (Acta hygienica, Suppl. 8/94). Then followed Methodical Instruction No. 3/1995 of the State Veterinary Administration "Regulating Feral Cat Populations in Urban Agglomerations". The third one as the "Methodical Recommendation of the NIPH for Securing against Pigeons and for Preventing the Spread of Pathogens from their

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Harbourages". Namely the latter two documents were elaborated in close collaboration with leading experts from the State Veterinary Administration and the Central Commission for Animal Protection at the Ministry of Agriculture of the Czech Republic.



All the verbal formulations in these methodical instructions were carefully verified in the course of dozens of interventions in collaboration with professional companies of interventions in collaboration with professional companies in many regions of the Czech Republic. While the requirements by the public for eradicating rodents have not changed substantially, we have registered increasing numbers of order for securing buildings against pigeons and for the limiting of their numbers in cities, and especially for trapping cats (Figure 1). Trends in the number of interventions regarding all three species are indicated in % and reflect over a thousand regulatory interventions.

The general regulations of all the methodical instructions primarily determine the qualification of professionals. The basic course on insect and rodent control of 96 hours in duration has its precisely fixed curriculum and prescribed exams. It is essential to finish an innovative course and exam every three years. For the trapping of live animals and manipulation with them it is necessary to supplement their training in a 32-hour course for obtaining professional qualification for trapping feral (gone wild) and selected synanthropic animals at the Institute of Postgraduate Studies of the Veterinary and Pharmaceutical University. The course is finished with an exam of unlimited validity.

The general regulations also include the mode of documentation and archive keeping of every intervention - with the following data: 1) an order for the intervention in writing, which can be initiated by private subjects - owners or operators of buildings, or by the state administration - the public health or veterinary services, or finally by environmental organs; 2) degree of infestation of the site, enumeration and range of interventions (types of buildings treated or area treated in m², kinds and amounts

of formulations applied, etc.). The importance of monitoring is stressed to this days (Anonymous, 1999); 3) in cases of trapping live animals, also a written approval from an officer of the State Veterinary Administration which, according to the law on animal protection, is the national organ for animal protection. Such an approval includes the number of animals to be trapped and how, as well as the kind of traps to be used; 4) in cases of sanitational and regulatory interventions, also a certificate on the taking over and liquidation of hazardous biological waste or animal cadavers; 5) important operational and construction faults in the sanitized enterprise that could depreciate the level of and guarantee for the service rendered; 6) in cases of bird proofing historic buildings, also a statement from a person in charge of them.

The procedure in the Standard Methods of Rodent Control implies the necessity to use only such formulations that have been approved by the Chief Public Health Officer. Currently, there are available more than 30 formulations. The mode of application must rule out contact with children and non-targeted species - domestic and wild-living animals. That is attained by using suitable bait stations that are labelled with their trade name and telephone number of the company conducting that rodent control, including the formulation applied and its active substance. The whole site must be tagged with leaflets indicating the name of the intervention, conducting company, contact telephone numbers, etc. Bait must be replenished regularly and always cleared away on termination of the intervention. Assessment of its efficacy can be carried out by comparing population densities before and after the intervention, according to the numbers of trapped pests, bait consumed, fresh tracks, excrement, etc. The percentage of effectiveness of rodent control is determined by dividing the value (trapped pest, bait consumed, excrement, etc.) after intervention by the value before intervention, multiplying by 100 and then subtracting from 100.

The procedure of the methodical instructions for regulating feral cat populations orders that the company conduction the intervention must keep a register of all trapped cats indicating the date, place and mode of capture, the result of veterinary examination, list of all activities including eventual putting to death and the reason for it. Date and place of setting free, eventually the name of its new owner. The inhabitants of neighboring buildings must be informed about the intervention two weeks before the trapping of feral cats. Trapping equipment (traps, casting nets, etc.) must be approved by officers of the district veterinary administration. The animals must not be injured during trapping. Bait (meat) must always be fresh. Traps must be checked every two hours and intervention by the public must be ruled out. The locality should be treated against ectoparasites. The transfer of animals in transport cages in special motor cars must take place within 12 hours after capturing the first animal. During that period there must be ensured a continuous supply of water for the animals. The animals must not suffer cold or overheating during transport. The animals caught must be examined by a veterinary surgeon, placed under quarantine and offered to animal homes, animal protection organs, and private individuals. Eventual putting to death must be carried out in accordance with the law on protecting animals against cruelty.

The procedure of the methodical instructions for bird proofing buildings against pigeons presumes the conducting of monitoring the obtaining of information on the size, special activity, feeding biology and reproduction of the urban population. For the safeguarding of building there must be implemented only such means that do not damage the surfaces of buildings and that cannot injure animals. Regulation of their numbers can be carried out only upon consent of officers of the State Veterinary Administration. In attics and closed premises it is possible to liquidate pigeons by shooting with pneumatic air rifles and special weapons. In the open and on roofs there is conducted trapping into cages. There must always be a source of fresh water in the cages and pigeons must be protected against the sun and rain. They are taken out and put to death in an atmosphere of  $CO_2$ . Biological waste and cadavers are liquidated in decontamination establishments. Sanitized premises should be treated with insecticides regularly for a period of several years.

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