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## BEST PRACTICE FOR THE HUMANE MANAGEMENT OF RATS AND MICE

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Abstract There are different ways of controlling rats (*Rattus rattus* and *Rattus norvegicus*) and mice (*Mus musculus*), each with its own advantages and disadvantages. This best practice guide focuses on the animal welfare aspect of the various methods and the integrated approach necessary to achieve animal-friendly control. Integrated Pest Management (IPM) means that, after a thorough study of the problem, one chooses the most suitable method to solve the problem. Preference is given to animal-friendly and non-chemical methods. The aim is to prevent damage, and within IPM it is possible not to proceed with control if an animal does not cause damage. This is a departure from the classic thinking about pests. The most important step within IPM is to take preventive measures. After all, the animals are so numerous that, if we would only focus on killing them, conspecifics would very quickly take their place. Traps range widely in their animal welfare impacts. For example, clamps, electrocution traps, captive bolt traps and live trapping cages for one animal can be described as animal-friendly. However, they must all be placed correctly and monitored regularly. Glue traps and live trapping cages for multiple animals are strongly discouraged from an animal welfare perspective. Our own research and the literature clearly show that anticoagulant rodenticides are not animalfriendly. In addition, their use poses risks to humans, the environment, and can lead to secondary intoxication. Therefore, these resources should only be considered as a last resort in the context of IPM. Other rodenticides such as chloralose or certain fumigants may offer a more animal-friendly alternative. If rodenticides are nevertheless chosen, correct use thereof is very important. For this reason private individuals need to able to find sufficient information and support when using these resources and, if necessary, be assisted by a professional pest controller.

Key words Norway rat, Black rat, House mouse, IPM