

## **REPRODUCTION OF SMALL MAMMALS IN THE MEADOWS OF RIGA CITY**

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The rapid rate of urbanization is linked to the formation of new habitats which are characterized by a specific fauna and flora. Nowadays this issue is becoming more apparent as the number and size of cities are increasing rapidly. The animals are forced to adapt to life in urban areas otherwise they may die. One of the indicators to take in account when analysing the impact of urban areas is small mammal reproduction rates and their changes.

During the research the reproductive capacity of small mammals in meadow habitats was analysed – four meadow habitats were surveyed in the city of Riga in the period from 2008 to 2010. Animal trapping was held twice a year – in autumn and summer months. During the research two species were found – common vole, *Microtus arvalis*, and striped field mouse, *Apodemus agrarius*. The males were divided into two age classes – adult and young. The mass of both testicles were weighted for adult males. Females were divided into two groups according to their capacity of reproduction. Several parameters were examined for those females who were breeding – lactation, 1st breeding, 2nd breeding, placental spots and number of embryos.

During the research the number of common vole adult females was significantly higher due to competition between species and habitat suitability for common species. The trapped number of common vole males was lower than females; the number of young striped field mouse was more common. The results show that the breeding period in urban environment can last until the end of October, which coincides the information found in literature data of small mammals breeding season duration in their natural environment.

For a better understanding of the impact of urban environment on the small mammal reproduction capacity and development of the population, a longer period of research is necessary and would also show the adaptability of small mammals.