

# First Knowledge of Winter Ecology of the Mound-building Mouse (*Mus spicilegus* Petényi, 1882) from Slovakia

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**Abstract:** The winter ecology of *Mus spicilegus* on north-western border of its distribution is presented in the article. The study was conducted in Eastern Slovakia. Totally, 264 individuals of *M. spicilegus* were caught and evaluated from October to March during the period 2004-2006 yearly. Results indicated that the over-wintering population was characterised by significant predominance of males (57.2%), however, immature individuals in the whole population were 72.3%. In autumn and in the first months of winter (October-December) the immature individuals prevailed. The mature vs. immature individuals ratio was 1: 3.6; while in January to March the ratio was balanced. The number of individuals caught per mound was 1-21 (average 6.9 in season 2004/2005, 10.4 in 2005/2006). During the investigation, 175 mounds were measured and examined. The average base of mound was 122 cm in long and 106 cm in wide, the average height was 29 cm and the average periphery on hill base was 396 cm. There were 3.0-26.0 (average 11.6) cm seed layers observed in the single mounds. Mounds were usually located 10-30 m apart from each other. Spherical nests of 10-35 cm in diameter were situated in a depth of 1-45 cm under the ground.

**Key words:** *Mus spicilegus*, over-wintering population, mounds, food stores, Slovakia