

ECOLOGICAL AND POPULATION CHARACTERISTICS OF TATRA  
SNOW VOLES (*CHIONOMYS NIVALIS MIRHANREINI*, SCHAEFER,  
1935) IN THE TATRA MOUNTAINS, SLOVAKIA

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Tatra snow voles (*Chionomys nivalis mirhanreini*, Schaefer 1935) occur only in Slovak and Polish Tatra Mountains. In Slovakia they live in two geographically separated populations – West Tatra Mountains and Low Tatra Mountains.

A study on small ground mammals in West Tatra Mountains–Roháče (one population), was carried out from 1996–2005. This research was aimed on monitoring of ecological characteristics of Tatra snow vole. It was realised each year from June to October by CMR method. Study area (1.08 ha) was situated on base of south slope of talus fan (about 1550 m a.s.l.). During the study period we found out that population number varied from 3 to 51 individuals and total number of individuals was increasing always from spring to autumn, when the population reached the highest number. Females predominated in spring. Their number was highest in summer and decreased in autumn. For the males, the number increased from spring to autumn. The highest total number was found in 2000, when 13 and 51 individuals were caught in spring and in autumn respectively. Sexually active individuals were caught in June. This evidence seems to confirm that the sexual activity starts already when snow voles are under snow cover. Most of sexually active individuals were caught in June and August with a number of males markedly lower than that of females. In October (except for 1998) we did not record sexually active males. In addition, the number of sexually active individuals was not correlated with the total number of all individuals.

In 2005 we realized the same research also on second, geographically separated, population in Low Tatra Mountains (Nízke Tatry). The main aim is to collect genetic material, which will be used to clarify phylogenetic relationships and status of both populations studied in relation to other European populations.

This work was possible thanks to VEGA project no. 1/7197/20 and 1/0017/03.