2. ABSTRACT

The aim of this study was to obtain general information about population density of red squirrel (*Sciurus vulgaris*) and to try to evaluate its occurrence in a small town.

Red squirrel densities were monitored during two winter seasons (2004-05 and 2005-06) in the western part of Bohemo-Moravian Highlands Observations took place at 4 model heterogeneous habitats, with sizes ranging from 6,45 to 16,59 ha. Population densities were estimated from tracks found on snow cover within study sites.. The lowest mean density-index of red squirrels was found in mixed forest (0,11 ex.ha^{-1}), than in beech-dominanted forest (0,14 ex.ha^{-1}) and the highest one was observed in two forests dominated by Norway spruce (0,21 ex.ha^{-1} and 0,18 ex.ha^{-1}). Character of distributional pattern of the red squirrels occurrence in the town Humpolec was investigated by means of squirrel questionnaires. The observations show more frequent occurrence of dark phase (80 %) than red phase. The highest probability of squirrel occurrence was found in city parts with with more arboreal places, further, Connectivity between squirrel population in the town and adjacent forest was also found.