Chrońmy Przyr. Ojcz. 74 (3): 173-180, 2018

Występowanie popielicy Glis glis w Pienińskim Parku Narodowym

Edible dormouse Glis glis in Pieniny National Park

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Key words: distribution of edible dormouse, habitat selection, population density, abundance.

We have studied the distribution, habitat selection and population density of the edible dormouse *Glis glis* in the Pieniny National Park (PNP). Data were collected for over 20 years.

The distribution of the edible dormouse was determined by searching for gnawed beech and hazel nuts left by dormice after feeding, checking bird and bat nest boxes and listening to characteristic loud calls emitted by animals during night activity. Population density of the edible dormouse was estimated on three study plots fixed in old mixed forests dominated by beech, using a method based on counting loud calls.

The edible dormouse was found in forests covering an area of over 385 ha, which accounts for nearly 23% of the whole forest area in PNP (Fig. 2). The largest area occupied by *G. glis* was found in forests dominated by fir, followed by stands with the dominant beech and stands dominated by spruce. The forest with dominant beech trees was not the largest area populated by dormice, but it was clearly preferred by this mammal ($\chi^2 = 109.1$, p < 0.001) when comparing the percentage of tree stands occupied by dormice with the percentage of these stands in the forests of PNP (Fig. 4).

The highest population density of 7 individuals per hectare was found on one of the three study plots (A; Table 1). We recorded higher population density of dormice in the year of mast seeding compared to the non-masting year, e.g. on the study plot B, the population density in the masting year was 4.3 ind. per hectare and no dormouse was found there in the non-masting year. Based on the estimated values of density, we assessed that about 2,500 edible dormice (one-year old and older animals that can emit loud calls) live in forests of PNP. In our opinion, the population of the edible dormouse in Pieniny National Park is sustainable and well-preserved.

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