

SUMMARY

Distribution and number of *Aegolius funereus* in the Lublinieckie Forests

The paper presents the results of censuses and some details of the Tengmalm's Owl *Aegolius funereus* breeding biology in the Lublinieckie Forests, situated in Upper Silesia (Poland). The forest is composed of pine *Pinus sylvestris* (95% of the area), with admixture of spruce *Picea abies*, oak *Quercus* sp. and birch *Betula* sp.

The first probably nesting Tengmalm's Owl was recorded near the village of Boruszowice on 25th April 1993 and an adult individual with young was recorded on 22th June 1994 in the Tworóg forest division. It was the first record of the species brood in Upper Silesia. The following year a pair was found in a hollow. In spring 1996 altogether 4 localities were recorded and in 1997 7 pairs were found. In the years 1998-2004 the censuses were done in a study area (124 km²) situated in the centre of dense forest. In the years 1998-2003 following numbers of breeding pairs, probably breeding pairs or occupied territories, were found: 11, 14, 8, 8, 13 and 7, respectively. In spring 2004 only 6 territorial males were recorded and the hollows occupied in previous years were empty. No successful brood was noted (Fig. 1).

The voice activity of the males started in the last decade of February and was the most intense in the third decade of March. Single males were still heard in the first decade of June. All breeding hollows of *Aegolius funereus* (N=17, Fig. 1) were situated in 100-120-year-old pine forests. Altogether 16 hollows were found in pine trees and only one brood was raised in a nesting box. In the Lublinieckie Forests the density of Tengmalm's Owl does not exceed 1.2 pairs per 10 km², which shows that the population occurs in the area for a short time and not all habitats are occupied. The smallest distance between neighbouring occupied hollows was about 900 meters. Hollows with broods were situated at the height of 4-11 m (most frequently 7-9 m) hole entrances were directed SE. The biggest danger for Tengmalm's Owl in the study area is overexploitation of forests and particularly logging of pine old stands – especially during breeding season. Placing of nesting boxes coated with sheet metal (in order to protect birds against predators) in 60-80-year-old tree stands could help to increase the numbers of *Aegolius funereus*.