CONTRIBUTION TO THE KNOWLEDGE OF CURRENT MIGRATION OF MINIOPTERUS SCHREIBERSII (KUHL, 1817) IN NW OF PANONIAN BASIN

PRIMOŽ PRESETNIK
Centre for Cartography of Fauna and Flora, Ljubljana office, Klinova 3, SI-1000 Ljubljana, Slovenia; E-mail: primoz.presetnik@ckff.si

INTRODUCTION
Miniopterus schreibersii is distributed throughout the southern part of Europe and migrates seasonally between hibernacula, equinocial and maternity roosts. It is typically a cave dwelling species, however, in some areas in the north of its range.

In the 50th and 60th of 20th century, migration between several summer and winter roosts were recorded between Austria, Slovakia and Hungary, and also to some Slovenian and Croatian localities. Sadly, populations of M. schreibersii have diminished and species is now regarded as regionally extinct in parts of Austria (Spitzerberger 2005), NW Hungary (Gombóth & Boldogh 2007) and in western Slovakia several important roosts have been destroyed (Lahovář & Lahovský 1990).

Unfortunately, the past population dynamic in Slovenia is not known as intensive bat research began only ten years ago. However, some Miniopterus schreibersii roosts are still occupied and in the last five years some previously unknown roosts have been located. Some of the roosts are even included in Natura 2000 areas but others are not.

AIMS AND METHODS
We assumed that Miniopterus schreibersii migrates between Slovenian roosts and the conservation of all these roosts would play a crucial role in maintaining the favorable conservation status of the so called “NE Slovenia” M. schreibersii population. Under the framework of the INTERREG IIA project, Conservation of Amphibians and Bats in the Alps-Adriatic Region, a small-scale bat-banding project on M. schreibersii in the north-eastern part of Slovenia was conducted to prove migration between roosts.

In March 2006, at the end of hibernation period, 64 out of 1200 Miniopterus were banded at the entrance of the Huda lalavija pri Dolcem Dolcu cave (A) with 2.9 mm inner diameter and codes SLO 1A 2002 - 2005. In the same and consecutive years all other roosts in NE Slovenia were surveyed once or twice a year by visual inspection or by mist netting.

RESULTS
In all, 11 banded bats (7% recovery) were found at four out of five known Miniopterus schreibersii localities in that part of Slovenia. All recoveries were to the east of the banding site, 24 km to the maternity roost in church in Padlače (B), and 29 km to the one in church in Zavle (C) 83 km to the equinocial roost in the castle, Grad na Gorškem (D), and 29 km to Bejšička cave (F). Additionally Croatian chiropteroologists reported recovery from the hibernacula in Tribunjacica cave (E), 190 km in a south-easterly direction.

CONCLUSIONS
• Observed migration fits well in the Miniopterus schreibersii migration net proven more than 50 years ago.
• The hypothesis of migration between Slovenian north-eastern roosts of M. schreibersii is proven, therefore,
• no new bat banding is planned, but,
• the monitoring of roosts for additional recoveries of banded bats will continue.

LITERATURE