

**THE PRESENCE OF *MYOTIS MYSTACINUS* (KUHLE, 1818),
NYCTALUS NOCTULA (SCHREBER, 1774) AND *BARBASTELLA*
BARBASTELLUS (SCHREBER, 1774) SPECIES (CHIROPTERA:
VESPERTILIONIDAE) IN THE MARAMUREȘ DEPRESSION
(ROMANIA)**

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Abstract. Three species of bats are mentioned for the first time for the vertebrate fauna of Maramureș Depression, increasing the number of the known species from 9 to 12, representing 40% of the total of 30 species identified in Romania.

Résumé. On présente trois espèces de chauve-souris nouvelles pour la faune de vertébrés de la Depression de Maramureș, en élevant le nombre des espèces connues de 9 au 12, ce qui représente 40% du total de 30 espèces identifiées en Roumanie.

Key words: Maramureș Depression, Romania, Chiroptera, new data, list of species.

The Maramureș Depression lies in the North-West of Romania (Fig. 1), and it is a clearly defined territory considering the physical and geographical aspects, being surrounded by the Maramureș, Țibleș, Lăpuș, Gutâi, Igriș Mountains, and to North, by the Tisa river.

The Maramureș Depression holds a surface of 3,281 km² and is characterized by a diverse relief, from river meadows to the mountain ridges, the lowest altitude being of 204 m, downstream the Teceu locality on the Tisa river bank, and the highest point being in the Rodnei Mountains (Pietrosu peak 2,303 m).

By the researches made until 2002 in the Maramureș Depression we identified the following nine species of bats, Szilagyi (1876), Dumitrescu et al. (1962-1963), Răduleț (1997), Murariu & Răduleț (1998), Ardelean & Bereș (2000), Chiș & Manole (2001-2002).

- Family Rhinolophidae Bell, 1836
 - *Rhinolophus ferumequinum* (Schreber, 1774)
 - *Rhinolophus hipposideros* (Bechstein, 1800)
- Family Vespertilionidae (Gray, 1821)
 - *Myotis myotis* (Borkhausen, 1797)
 - *Myotis blythii* (Tomes, 1857)
 - *Myotis brandti* (Eversmann, 1845)
 - *Pipistrellus pipistrellus* (Schreber, 1774)
 - *Plecotus auritus* (Linnaeus, 1759)
 - *Plecotus austriacus* (Fischer, 1829)
 - *Vespertilio murinus* (Linnaeus, 1758)

In 2003, apart from these species, we identified three more species belonging to the Vespertilionidae family (Gray, 1821):



Fig. 1 – Location of the Maramureș Depression, Romania.

Myotis mystacinus (Kuhl, 1818) - Whiskered bat

It is a species spread throughout Europe till the 65° parallel, Northern latitude and it is absent in Scotland, Northern Scandinavia and in Southern Spain, Schober & Grimmberger (1991).

In Romania, it is considered a relatively rare species, slightly anthropophile, occurred in localities, parks, gardens, preferring the limestone areas (Gheorghiu et al., 1999).

In the Maramureș Depression, the species was identified for the first time by the authors on the 10th and 20th of June 2003, in the Sighetu Marmăției locality, in the attic of an old house. The two specimens collected on these two dates are preserved in the patrimony of the Natural Science Museum, in Sighetu Marmăției, bearing the inventory numbers 3312 and 3314.

In UTM system, the species was localized in square GU 11; Sighetu Marmăției; Maramureș (Fig. 2).

Nyctalus noctula (Schreber, 1774) - Evening red bat

It is a species spread throughout Europe till the 60° parallel, Northern latitude, Schober & Grimmberger (1991).

In Romania, it is considered a frequent species in the deciduous and coniferous forests, where they prefer tree hollows, nests, but also attics and cracks in buildings walls (Gheorghiu et al., 1999).

In the Maramureș Depression, the species was identified by the authors on the 18th of June 2003, in the attic of the Coșnea hunting chalet, Poienile de sub Munte

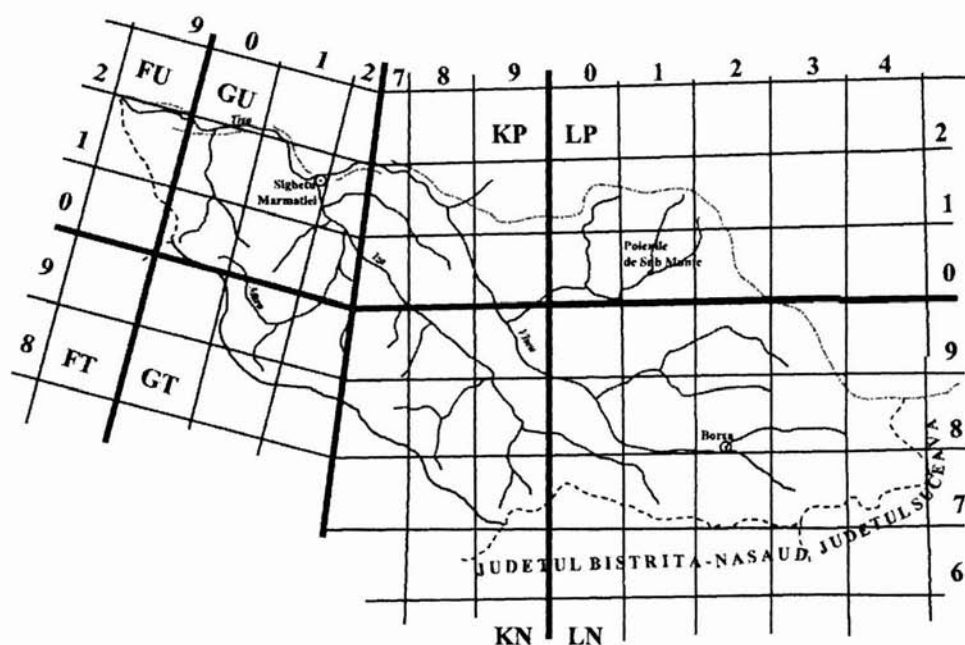


Fig. 2 – The enlarged Maramureș Depression's map in the Universal Transverse Mercator System.

locality. The presence of this species was confirmed by Murariu (*in verbis*, 2003) in the area this time, using the ultrasound Detector for bats.

In UTM System the species was localized in square LP 10, Coșna Chalet, Poienile de sub Munte – Maramureș.

Barbastella barbastellus (Schreber, 1774)

It is a species spread throughout western Europe till the South of England and in Norway and Sweden till the 60° parallel, Northern latitude, Schober & Grimmerger (1991).

In Romania, it is considered a rare species. In summer, it can be seen in localities between window frames, cracks in the building walls, cellars or in forests in the hollows (Gheorghiu et al., 1999).

In the Maramureș Depression the species was identified for the first time by the authors on the 25th of August 2003, in Sighetu Marmatiei locality. The specimen is preserved in the patrimony of the Natural Science Museum, bearing the inventory number 3311. It was captured near a window of the underground floor of the Town Hall, an old building in the centre of the town.

In UTM system the species was localised in square GU 11; Sighetu Marmatiei; Maramureș.

Conclusions

The data presented in this paper raise the bat species number known in the Maramureș Depression from 9 to 12 species, which represent 40% of the total of 30 species identified in Romania.

We consider this percentage worthy to be taken into consideration, knowing that the surface of the Maramureș Depression is only 3,281 km².

In volume 16 of the "Fauna României-Chiroptera", Editura Academiei Române, Valenciuc (2002) on the spreading maps of the 28 species of bats, in the Maramureș Depression there are mentioned only two species; for that reason we are trying to introduce into the scientific field the data contained in the patrimony of the Maramureș Museum, Chiș & Manole (2003).

PREZENȚA SPECIILOR *MYOTIS MYSTACINUS* (KUHLE, 1818), *NYCTALUS NOCTULA* (SCHREBER, 1774) ȘI *BARBASTELLA BARBASTELLUS* (SCHREBER, 1774) (CHIROPTERA: VESPERTILIONIDAE) ÎN DEPRESIUNEA MARAMUREȘULUI (ROMÂNIA)

REZUMAT

Autorii semnalează pentru prima dată în Depresiunea Maramureșului prezența a trei specii de lilieci din familia Vespertilionidae: *Myotis mystacinus* (Kuhl, 1818), *Nyctalus noctula* (Schreber, 1774) și *Barbastella barbastellus* (Schreber, 1774). Numărul speciilor de chiroptere cunoscute în această zonă ajunge astfel la 12, ceea ce reprezintă 40% din totalul speciilor (30) semnalate până în prezent în România.

LITERATURE CITED

- ARDELEAN, G., I. BEREȘ, 2000 – Fauna de vertebrate a Maramureșului. Colecția Universitaria, Edit. Dacia, Cluj – Napoca. 378 pp. (in Romanian)
- CHIȘ, T., M. MANOLE, 2001 – 2002 – Contribuții la cunoașterea faunei de chiroptere din Depresiunea Maramureșului. Studii și comunicări. Științele Naturii, Muzeul Județean Satu-Mare, 2-3: 226-231. (in Romanian)
- CHIȘ, T., M. MANOLE, 2003 – Ordinul Chiroptera - o nouă colecție în patrimoniul Muzeului de Științele Naturii Sighetu-Marmației (partea I). Tradiții și Patrimoniu, Muzeul Maramureșului, Sighetu-Marmației, 4-5: 53-54. (in Romanian)
- DUMITRESCU, M., J. TANASACHE, T. ORGHIDAN, 1962-1963 – Răspândirea chiropterelor în R. P. Română. Institutul de Speologie „Emil Racoviță”, 1-2: 509-575. (in Romanian)
- GHEORGHIU, V., V. BERTRAND, A. GIURGINCA, 1999 – Cheia de identificare a chiropterelor din România. Institutul de Speologie „Emil Racoviță”. (in Romanian)
- MURARIU, D., N. RĂDULEȚ, 1998 – Mammalian fauna (Mammalia) from Maramureș Depression, Romania. Travaux du Muséum National d'Histoire Naturelle „Grigore Antipa”, 40: 609-621.
- RĂDULEȚ, N., 1997 – The presence of *Myotis blythii* (Tomes, 1857) (Chiroptera, Vespertilionidae) in Maramureș, Romania. Travaux du Muséum National d'Histoire Naturelle „Grigore Antipa”, 37: 159-166.
- SCHOBER, W., E. GRIMMBERGER, 1991 - Guide des chauves-souris d'Europe. Edit. Delachaux et Niestle, Neuchatel-Paris. 223 pp.
- SZILAGYI, I., 1876 - Marmoros varmegye egyetemes leirasa. Cap. «Mammalia». A magyar orvosok es természetvizsgalok nagygyulesen, 19: 211-214.
- VALENCIUC, N., 2002 – Mammalia, Chiroptera. In: Fauna României. Edit. Academiei Române, 16 (3): 1-166. (in Romanian)

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