DATA ON THE BAT FAUNA OF THE UPPER PART OF THE TÂRNAVA RIVERS BASIN (TRANSYLVANIA, ROMANIA)

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ABSTRACT

The paper presents the results of chiropterological researches carried out since 1999 in the upper part of the Târnava Rivers Basin. During the study nine bat species were identified. Check-up of village churches, detectoring and determination of dead specimens were used as methods. Bats were present in more than half of the checked churches. This fact suggests the importance of old buildings as roosts for bats, and their considerable role in bat protection.

ZUSAMMENFASSUNG: Daten zur Fledermausfauna des oberen Teils des Târnava-Flusstals (Transsilvanien, Rumänien).

Der Aufsatz stellt die im Jahre 1999 gesammelten Daten über die Fledermausfauna von dem oberen Teil des Flussbeckens der Târnava vor. Während der Datenerhebung haben wir neun Fledermausarten festgestellt. Dabei gingen wir nach folgender Methode vor: Untersuchung von Gebäuden (hauptsächlich der Kirchen), Beobachtungen mit Detektor, Untersuchung der gestorbenen Exemplare. In mehr als der Hälfte der Kirchen haben wir Fledermäuse gefunden. Diese Daten beweisen die Wichtigkeit und die Bedeutung der Kirchen beim Schutz der Fledermäuse.

REZUMAT: Date referitoare la fauna de lilieci din bazinele superioare ale râurilor Târnave.

Lucrarea prezintă datele colectate începând din anul 1999, despre fauna de lilieci din zona superioară a Bazinului Târnavelor. În cursul studiului nouă specii de lilieci au fost identificate, prin aplicarea următoarelor metode: controlarea bisericilor, utilizarea detectoarelor de ultrasunete, determinarea exemplarelor moarte. Liliecii erau prezenți în mai mult de jumătate a bisericilor controlate, fapt ce arată importanța acestora ca adăpost pentru lilieci, lucru care nu trebuie neglijat în protecția acestor animale.

INTRODUCTION

The nature degradation due to human activity was increased in the last decades. Bats are endangered in every respect, many species have their roosts in buildings, or in other places expose to human disturbation (e.g. forests, caves). For this reason the direction of natural processes in bat populations become more and more determinated by the human interference.

In Romania the knowledge about bats distribution and ecology is extremely poor. Papers published in the past decades are focused mainly in cave-dwelling bats, very few publications are about hose-dwelling bats (Barbu and Sorescu, 1968; Valenciuc and Ion, 1969; Valenciuc, 1989; Răduleț, 1997). Studies started in the last few years are focused on bats distribution and some ecological aspects, which can provide important data for protection measures.

For the territory of Harghita County we can find some chiropterological data in the literature (Méhely, 1900; Paszlawszky, 1918; Dumitrescu et al., 1962 - 1963), but none from the study area. In 1999 - 2000 was made a study on house - dwelling bats in this county (Jére and Dóczy, 2001), and some of the data collected during the study are from the Târnava Rivers Basin.

MATERIALS AND METHODS

The study area situated in the western hilly part of Harghita County, in the vicinity of the western slopes of the Eastern Carpathians. The boundaries of this territory are on the east of the Harghita Mountains, and on the north of the Gurghiului Mountains. This territory represent the upper part of the Târnave rivers basin, the most important watercourses are the Târnava Mică and Târnava Mare rivers, and streams like Brădeşti, Fernic and Corund which flow into them. The relief altitude is here between 400 and 700 m above the sea level, the medium annual temperature is about 8°C.

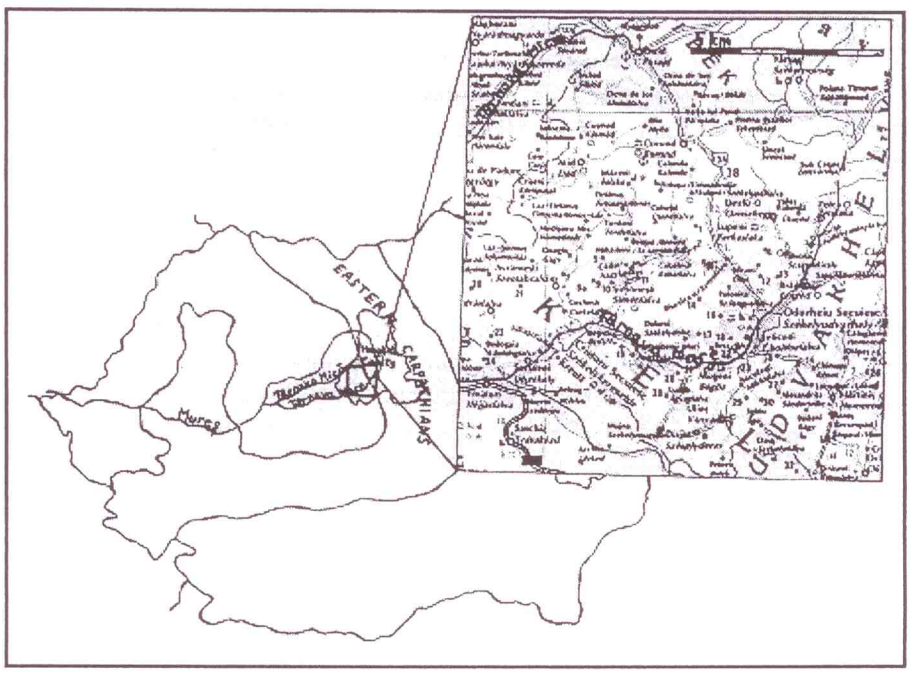

Fig. 1: Location of the study area.