The bat fauna of the caves near Havran in Western Turkey and their importance for bat conservation

by Bernd-Ulrich Rudolph, Alois Liegl and Ahmet Karataş

Abstract. This paper describes the bat fauna of a cave system with three caves in a karst area near Havran in Western Turkey. One of these caves harbours approximately 15-20,000 adult bats of eight species, all of them forming nursery colonies. This represents the second largest summer colony of bats in Turkey. The species richness and the colony sizes qualify the site as an *Important Mammal Area* and would qualify it as a Special Area for Conservation, according to the Habitats Directive of the European Union. The area including the most important bat cave will be partly flooded by a dam which is currently being constructed by the State Water Authority.

Kurzfassung. In dieser Arbeit wird die Fledermausfauna eines Höhlensystems mit drei Höhlen in einem kleinen Karstgebiet nahe Havran in der Westtürkei beschrieben. Eine dieser Höhlen beherbergt 15–20.000 Fledermäuse in acht Arten. Alle Arten bilden in dieser Höhle Wochenstubenkolonien. Diese stellt das zweitgrößte Fledermaus-Sommervorkommen in der Türkei dar. Der Artenreichtum und die Koloniegrößen qualifizieren das Gebiet als ein *Important Mammal Area* und würden es als ein Besonderes Schutzgebiet nach der Fauna-Flora-Habitat-Richtlinie der Europäischen Union qualifizieren. Das Gebiet einschließlich der wichtigsten Fledermaushöhle wird teilweise von einem Staudamm überflutet werden, der gegenwärtig von der Staatlichen Wasserbaubehörde errichtet wird.

Key words. Balıkesir, Havran Caves, Turkey, Middle East, bat detector, roosting site.

Introduction

Cave-dwelling bats play an important role in the Turkish bat fauna, since more than one-third of the country consists of Jurassic rock formations containing thousands of caves. The number of caves is estimated at more than 40,000. Studies of bats in Turkey focus mainly on taxonomic, caryological or distribution issues. In most cases, these studies contain no information about bat abundance, but only numbers of collected specimens. Little is known about the importance of certain roosts from a nature conservation point-of-view. However, the assessment and documentation of the most frequented bat sites is one of the urgent tasks for mammalogists in Turkey, since caves are exploited touristically and are threatened by infrastructure projects all over the country. This paper presents recent observations on bats in the Havran Cave System (İnönü Köyü Mağarası), which is under serious threat due to a dam project.

Site description

The study area is a small karst area extending over approximately 350 ha close to the village of İnönü, about 5 km east of Havran, Balıkesir province, Western Turkey (39°34'N, 27°10'E). A

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