A new locality record for the Desert long-eared bat, *Otonycteris leucophaea* (Severcov, 1873) in Iran

Sohrab ASHRAFI¹*, Mohammad ZARRINTAB², Soheil EAGDERI³

¹Department of Environmental Sciences, Faculty of Natural Resources, University of Tehran, Karaj, Iran.
²Department of Environmental Science, University of Kashan, Kashan, Iran.
³Department of Fisheries, Faculty of Natural Resources, University of Tehran, Karaj, Iran.

*Corresponding author: sohrab.ashrafi@ut.ac.ir

Abstract: Bat fauna of Iran has been well-studied and documented. Up to now, 50 species of bats belonging to 16 genus have been reported from Iran. Here we report collection of two desert long-eared bat, *Otonycteris leucophaea* specimens from the Parvand Protected Area in the north-east of Iran as a new locality for this rare bat species, showing its range extension toward the central part of Iran.

Keywords: Long-eared bat, Distribution, Range extension, Khorasan Razavi, the Parvand Protected Area, Iran.

Introduction

Mammals of Iran, including bats have been widely studied through last decades (see Lay, 1967; Etemad, 1969; DeBlase, 1980; Benda et al., 2012). Lay (1967) and Etemad (1969) reported 28 species of bats from Iran, and later DeBlase (1980) and Karami et al. (2008) extended this list to 38 and 45, respectively. Finally, a comprehensive review was published by Benda et al. (2012) reporting 50 species of bats belonging to 16 genus from Iran.

The genus *Otonycteris* Peters 1859, was comprised only one species namely *O. hemiprichii* (Koopman, 1994; Simmons, 2005). In addition, five subspecies have been described for this species, which live in arid and semi-arid regions (Koopman, 1994; Gharaibeh and Qumsieh, 1995). *Otonycteris leucophaea* (Severcov, 1873) occurs in the western and central Palaearctic realm and from morocco and Niger to the north-west of India (IUCN, 2013). Benda (2010) suggested three distinct morphotypes of this species for North Africa, western part of the Middle East, and Central Asia. Recently, the molecular evidences showed two separate species of this genus i.e. *O. hemiprichii* in the eastern part of the Middle East and *O. leucophaea* in the Central Asia (Benda et al., 2012).

These two long-eared bat species inhabit in desert and sub-desert regions of central, east and south-eastern parts of Iran. Up to now, *O. leucophaea* has been reported only from north-east of Iran along the border of Iran and Turkmenistan (Fig. 1). Here we report the collection of two desert long-eared bat, *O. leucophaea* specimens from the Parvand protected area in east of Iran as a new locality for this rare bat species, showing its range extension toward the central part of Iran.

Materials and Methods

Two specimens (Male and Female) of *O. leucophaea* were collected by mist-net on June 5, 2011 from the Parvand Protected Area located in the eastern part of Khorasan Razavi Province (north-east of Iran). Bats were captured in the mountainous rocky area with the relatively poor vegetation cover (N35°51'08.1", E57°02'51.5", elevation: 653 m) (Figs. 1, 2).

Results and Discussion

Morphometric characteristics and measurements of the two collected specimens of *O. leucophaea* from the Parvand Protected Area indicated clear identification of *O. leucophaea* (Table 1). However, identification of these...
Based on the previous studies on the trophic niche of this species, large arthropods such as coleoptera, blattodea, orthoptera, solpugida and scorpionida could be its food items (Arlettaz et al., 1995; Fenton et al., 1999; Benda et al., 2006).

As mentioned by Breda et al. (2012), distribution of *O. leucophaea* is a Turanic biogeographic place in north-eastern Khorasan. Here we report the range extension of this rare bat species toward the central part of Iran from its previous locations in the north-east of Iran along the border of Iran and Turkmenistan i.e. this new locality is western and southern most record of this species in Iran.

**Acknowledgement**
Our special thanks to M. Kalateh for his cooperation during fieldwork and K. Faizolahi for giving valuable comments. Also we are indebted to A. Khani who kindly provides us facilities to work in the Parvand Protected Area.

**References**


DeBlase A.F. 1980. The bats of Iran: systematics, distribution,
Etemad E. 1969. The Bats of Iran, and the Keys to Identify Them. Tehran: University of Tehran, 228 p. (In Farsi)