

Notes on the ecological peculiarities of the Iranian Jerboa, *Allactaga firouzi* Womochel, 1978

(Mammalia: Dipodidae)

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Abstract. The Iranian Jerboa, *Allactaga firouzi* Womochel, 1978, is restricted to a small part of the Iranian Plateau and has been listed in the IUCN Red List. We have recorded the habitat characteristics in the burrows, observation and capture sites. We could distinguish four types of burrows including nest burrows, temporal burrows, winter burrows and high shelter burrows. In total, 352 individuals were recorded with flashlight and hand net. All the captured individuals were released after the external characters were measured and the sex determined. The population density ranged from a minimum of 2.3 individuals/Km² to a maximum of 4.4 individuals/km² when juveniles became catchable. Breeding usually occurred from April to May and the highest density occurred in late May. Vegetation structure, soil texture and altitude were found to be the main factors affecting the distribution of this species. Stepwise logistic regression revealed a significant positive association between the presence of *Anabasis aphylla* and the probability of occurrence of the Iranian Jerboa ($P < 0.001$).

Key words. Iranian Jerboa, habitat associations, distribution, conservation.

Introduction

The Iranian Jerboa (*Allactaga firouzi* Womochel, 1978) is one of the 13 species of the genus *Allactaga* Cuvier, 1836 of the subfamily Allactaginae. This subfamily includes three genera (*Allactaga* with 12 species, *Allactodipus* Kolesnikov, 1937, with one species, and *Pygeretmus* Gloger, 1841, with 3 species) (HOLDEN & MUSSER 2005). Additionally, the Toussi Jerboa (*Allactaga toussi*) has recently been described from north-eastern Iran (DARVISH et al. 2008). However, the number of species is controversial. For example, some studies consider *Allactaga firouzi* to be conspecific with *A. hotsoni* (see SHENBROT et al. 1995) but we await a thorough comparative morphological, craniological and genetic study before accepting this synonymy.

The Iranian Jerboa (Fig.1) was reported only from a small part of Isfahan province in Iran and has a very restricted distribution: there is no information about this species except the article that described it as a new species (WOMOCHEL 1978). Because of its restricted geographic distribution and habitat degradation, it had been classified as Critically Endangered in the IUCN Red List. However, after a comprehensive review in 2008, its position was changed to the "Data Deficient" category. Other members of the Dipodidae are relatively well studied in the Middle East and elsewhere. For example, the burrows, feeding habits and behavior of *Allactaga elater* (Lichtenstein, 1828), *A. euphratica* Thomas, 1881, and *A. williamsi* Thomas, 1897, along with the reproductive biology of *A. euphratica* and *A. williamsi*