

A New Locality for Endemic Taurus Frog *Rana holtzi* Werner (1898) in Turkey

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Received: January 02, 2008
Accepted: March 15, 2008

Abstract

In the studies on *Rana holtzi* (Taurus Frog), it has been denoted that this species can only be found in Middle Taurus Mountains, in Nigde region and in a few small lakes in Bolkar Mountains. However, in the observations carried out in June and July 2006, around Kahramanmaraş, Göksun area new habitats and breeding areas for this species, which are very far from the typical locality for this endemic frog, were found. The significance of this area for the future of this species is obvious when the problems that are encountered by the Taurus Frog is taken into consideration.

Key words: New locality, Endemic Taurus frog, Turkey

INTRODUCTION

The number of registered amphibian species in Turkey is 26 [1]. The status of the two species that are not included in this number is not very clear [2]. *Rana holtzi* which is one of those species is an endemic species. The only known habitat of this species in the literature was Karagöl (altitude 2500 m approximately) which is located around Bolkar Mountains and Çiniligöl (altitude 2550m approximately) which is located 100 m north of Karagöl [3], [4], [5]. In addition, a new habitat was described in Egrigöl at the altitude 3000 m of the same mountain [6]. The problems that are encountered by this endemic frog threaten the future of this species. The results of the studies carried out on the population level of this amphibian species indicated that the habitats of those species are under a serious risk of decrease [5]. Therefore, besides the protection measures, the determination of the new habitats will diminish the concerns about the future of this species.

MATERIALS and METHODS

The *Rana holtzi* individuals were observed and photographed in Menevcil Brook, Göksun, Kahramanmaraş during an observation around this region. The first observation was carried out in June 2006 and the second observation was repeated next month, July 2006. Taurus frogs are observed in both of the observation.

RESULTS and DISCUSSION

In the field observations carried out in June and July 2006 within the province of Kahramanmaraş, in the region of Göksun district, and around Menevcil Brook many individuals of this species were observed. Menevcil Brook is a running stream. The individuals of *Rana holtzi* were observed on some points through Menevcil Brook, in the meadows on the banks of the brook, and in the ponds which occur within the bed of the

brook. Those individuals were also photographed (Figure 1.). As the adults and young animals were observed together, it can be concluded that those species also breed in the same area.

A broader area was searched thoroughly in order to determine if any other suitable habitats for those species exist. A fresh water pond in the east of Menevcil Brook was found. This fresh water pond (altitude 1550m approximately) is located within the coordinates of **037 272578 E** and **4189359 N**. This fresh water pond has no surface connection with Menevcil Brook. Moreover, there is a hill between this pond and the Menevcil Brook. Thus, this pond is fed by a source within itself. *Rana holtzi* individuals are also observed around this pond. The area that the pond is located has an inclined topography. The pond is 50 m below the Menevcil Brook which streams from a 1600 m altitude. There is not any other lake, river or pond in the neighborhood. That is, this pond which is independent of the Menevcil Brook is a second habitat for *Rana holtzi* in this region.



Figure 1. A *Rana holtzi* individual from their habitat along Menevcil Brook bank

Taurus Frog that is known to live in two localities in Bolkar Mountains, has been regarded as a strictly protected species by the 2002 update report of Bern Convention. Moreover, the problems that they face in their terra typical threaten their future. Introduction of predatory fish, including carp, which is fed by the larvae of the Taurus Frog into the lakes, using dynamite in fishing, illegal smuggling of adults, and being nourishment of some aquatic beetles have led to a significant decline in the population. In fact, a study carried out in 2003 indicated that the habitats of those species are under the risk of decline. According to the results of this study, the number of the individuals has decreased 70% since 1960 [5]. It is also known that the population of amphibian species all around the world has declined [7], [8] and [9]. As the literature regarding the population of frog species in Turkey is limited, this new locality we introduced in this study is significant in this field. Moreover, it is also important for the ecology of the species as its habitat is defined as high mountain lakes surrounded by meadows by [4]. The species can spread easily as the new habitat is a stream.

This area, the second registered habitat of *Rana holtzi* was directly interfered during an activity in previous years. The pipeline that goes through this area intersects Menevcil Brook more than one points. During the fieldwork, it was overlooked that this area is the habitat of *Rana holtzi*. However, fortunately this activity did not cause irrecoverable damage to the habitat.

Habitats. Secretariat Memorandum prepared by the Directorate of Environment and Local Authorities. (2002), Strasbourg, 26 pp.

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