

Habitat selection of the Eurasian Otter, *Lutra lutra*, in Jajrood river, Iran

(Mammalia: Carnivora)

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Abstract. The Jajrood River, with 140 km length in the east of Tehran, was selected for this study. To study otter distribution, 16 sites at about 5 km intervals were selected and otter signs, habitat parameters such as vegetation cover, river width and the presence of fish in the river were recorded for each 600 m stretch by walking its entire length. A total of 599 signs of otter presence (spraints, tracks, holts, rolling places and passes) were identified over the whole study period, the most common being spraints. Otter spraints were found in 6 of the 16 sites, and three core distribution areas were identified. A seasonal change was found in spraint frequency in the study area. Multiple linear regressions was used for predicting the variables that influence sprainting activity. Significant and positive relationships were found between the number of otter signs, the altitude and the presence of pools.

Key words. Eurasian Otter, *Lutra lutra*, habitat structure, signs, spraint, distribution, Jajrood River, Iran, Middle East.

Introduction

The Eurasian Otter (*Lutra lutra* (Linnaeus, 1758)) is widely distributed in the aquatic ecosystems of Iran. It is found in most rivers, lakes, pools, etc, in the Gilan, Mazandaran, Azarbaijan, Tehran, Kordestan, Kermanshah, Markazi, Isfahan, Khorasan, Chaharmahal-Bakhtiari, Fars, Khozestan, and Lorestan provinces. Major threats to Iranian otter populations include habitat degradation due to developmental projects, reclamation of wetlands for settlement and agriculture, reduction in prey, poaching and water pollution (GUTLEB et al. 1996, KARAMI et al. 2006, KIABI 1993).

We surveyed a river to the north-east of Tehran in order to study otter distribution and to show the influence of the different factors which determine otter distribution, and to develop a model which allows the prediction of the distribution of the otter in a certain area.

Material and methods

Study area. The study was carried out at the River Jajrood, which runs about 140 km from Kharasang Mountain to the Waramin plain. The river is situated in the north-eastern part of Tehran province in Iran (Fig. 1). The climate is semi-arid. The average annual temperature is 15°C and average annual precipitation averages 280 mm. The altitude of the study area extends from 1200 m to 1370 m. The riparian vegetation is generally dominated by *Salix* spp., often associated with