

# Development of the population of the European Fallow Deer, *Dama dama dama* (Linnaeus, 1758), in Turkey

(Mammalia: Cervidae)

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**Abstract.** In order to conserve the last autochthonous population of the European Fallow Deer, *Dama dama dama* (Linnaeus, 1758), the Turkish Government began a breeding programme at Düzlerçamı near Antalya in 1966. The programme began with 7 animals and the numbers continuously increased until the mid-1980s, when they reached over 500 animals. However, the population then collapsed until the year 2000 and did not recover. Today it comprises less than 130 individuals. The reasons for the population collapse are not fully understood but are thought to be a combination of several factors related to increasing human pressure such as urbanisation, recreational activities, and poaching. The population is much below the carrying capacity of the area. Attempts to re-introduce Fallow Deer into other areas of Turkey have not been successful but should be further considered as an option to minimise the risk of extinction, as at present the entire gene pool of the Turkish autochthonous population is concentrated at Düzlerçamı.

**Key words.** Antalya, Düzlerçamı, reintroduction, breeding programme, Middle East.

## Introduction

The Fallow Deer is represented by two different subspecies: the Persian Fallow Deer, *Dama dama mesopotamica* (Brooke, 1875) and the European Fallow Deer, *Dama dama dama* (Linnaeus, 1758). Some authors separate them at the species level. They can be distinguished by their different sizes (Persian Deer are larger) and by differences in the antlers and the tail colouring (HALTENROTH 1959). Recent genetic studies using mitochondrial DNA have confirmed that *D. d. mesopotamica* is strongly differentiated from *D. d. dama* (MASSETI et al. 2006, 2008). Both forms were originally neighbours but have been isolated by geographic barriers in the east and south/southeast of Turkey. The range of the Persian Fallow Deer extended from Iran over Iraq to Syria and Palestine, and included some parts of southern and south-eastern Turkey. European Fallow Deer existed north and west of this area (HEIDEMANN 1987). The Persian Fallow Deer, which was previously abundant throughout western Asia, is currently listed in the IUCN Red List as endangered (RABIEI 2008). A report from 1994 estimated the wild population in Iran to be no more than 15 animals (HEIDEMANN 1994), and today the global population is thought to comprise less than 250 mature individuals (RABIEI 2008).

As a result of introductions by the Phoenicians, Romans, Normans and others, however,