

Population Ecology and Biology of *Testudo hermanni* (Reptilia: Testudinidae) at the Eminska Mountain, Bulgaria

Ivo Evstatiev Ivanchev

2, Bisser St., 1421 Sofia, Bulgaria, e-mail: geain2003@yahoo.com

Abstract: A small population of *Testudo hermanni boettgeri* MOJSISOVICS, 1889, was discovered and studied in detail in the easternmost part of the Balkan Mountain Range – Eminska Mountain. 57 *Testudo hermanni* GMELIN, 1789, with adult sex ratio males/females of 1.52 were marked and described. Only one male specimen of *Testudo graeca ibera* PALLAS, 1814, was found and marked. The age structure was skewed, low juvenile/female ratio – 0.19 pointed at an alarming decline of population density. Detailed, continuous observations over the seasonal and daily activity level, territorial and courtship behaviour were conducted in the field and within the enclosed protected 2000 sq. m area. Seven adult females, 3 males and 12 hatchlings were the object of detailed observations in the enclosed protected area. The actual nest excavation and the egg laying process were precisely described, along with some unusual behaviour, the preferred time for nesting was assumedly established. Monitoring of temperatures during incubation period of a natural nest was carried out and the results were compared with the ones measured in an artificial incubator environment. Detailed description of the hatchlings and their development and growth rate during the first 90 days was made.

Key words: *Testudo hermanni*, growth rate, age, structure, behaviour, Bulgaria