

GENETIC ANALYSIS OF STONE MARTEN (*MARTES FOINA*) GREEK POPULATIONS

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The stone marten (*Martes foina*) has a widespread distribution throughout much of Europe and central Asia. The distinction of the species into 11 subspecies has mostly been based on morphometrical and craniometrical evidence. In Greece, it is considered that three subspecies exist: *M. foina foina* in the mainland, *M. f. milleri* in Rhodes and *M. f. bunites* in Crete as well in other Aegean islands. The present work uses mitochondrial DNA markers in order to: i) identify possible genetic differentiation between Greek stone marten populations, ii) study their genetic variability, and iii) analyze the geographical distribution of the resulting genealogical lineages throughout Greece. DNA was extracted, so far, from 80 stone marten liver samples from Macedonia, Thrace, Thessaly, Peloponnese, Crete and other Aegean islands. Subsequently, PCR was used for amplification of two different mtDNA markers: cytochrome b (cytb) gene and the control region (D-loop). PCR products (around 1Kb each) were sequenced and all the sequences were aligned and examined for genetic polymorphisms. Preliminary results, mainly based on analyses of cytb-sequences, show only a few (nine) point mutations and do not favor either the existence of subspecies or the existence of a polymorphism characteristic for a specific Greek stone marten population. Analysis will continue based on more cytb and D-loop sequences.