

PALAEONTOLOGICAL AND ARCHAEOLOGICAL EVIDENCE FOR TURTLES ON CYPRUS, WITH NEW INFORMATION ON LIVING TORTOISES

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INTRODUCTION

There are very few reports of turtle remains (terrestrial, fresh-water, or marine) from palaeontological or archaeological sites of any period on Cyprus. The available data is surveyed here. In this note we also present new evidence for wild terrestrial turtles (tortoises) on the island.

Cyprus has been an island for roughly 15 million years (Boekschoten and Sondaar 1972:333). As a result, all terrestrial (and fresh-water) animals have had to reach the island by swimming, drifting on floating vegetation or wood, or to have been imported by man.

Cyprus today does not have a large herpetofauna, and very little work has been done on them (Schätti and Sigg 1989; Osenege 1989; Demetropoulos and Lambert 1986). No regional or national surveys have been undertaken, and no mapping data exists (Corbet 1989).

THE PALAEONTOLOGICAL EVIDENCE

Reed (1932) published on a Miocene fresh-water turtle, probably *Trionyx (Aspideretes)* sp., from 136 ft. below the surface in a water-shaft located 1.2 Km northwest of Peristerona village. It was identified by Dr. W. E. Swinton in 1932 and is number C.9182 in the Sedgwick Museum, University of Cambridge, where the catalogue entry records that it was collected by C.P. Manglis, is Miocene in date, and is represented by costal plate fragments (personal communication from M. Dorling to Reese, 6 February 1992).

Two Pleistocene turtle carapace fragments were found in 1969 by Boekschoten and Sondaar (1972) in the lignitic clay in the lake bottom deposit at Kythrea-*Kephalovrysi*. These bones are presently stored in the Faculteit Aardwetenschappen (Room W.324, Tray P58), Universiteit Utrecht, The Netherlands.

THE ARCHAEOLOGICAL EVIDENCE

There are nine turtle samples from the pre-Neolithic (ca. 8500 B.C.) site of Akrotiri-*Aetokremnos* on the south coast (analysis by Reese). Aceramic Neolithic Dhali-*Agridhi* yielded one tortoise femur (Croft 1989). Late Neolithic Ayios Epiktitos-*Vrysi* on the north coast produced 14 samples of a marine turtle (Legge 1982).

One small plastron fragment of a *Testudo* was found in Trench 9 (Koufos locality), Layer 47, in the Middle Cypriot III to Iron Age dump at Kalopsidha-*Tsaoudhi Chiftlik* in eastern Cyprus (Gejvall 1966). A *Testudo* carapace fragment was found in Tomb I (MC III-Late Cypriot [LC] I) at Toumba tou Skourou in the northwest (Vermeule and Wolsky, 1990, personal analysis by Reese).

LC IA (ca. 1650-1575 B.C.) Phlamoudhi-*Melissa* in the north yielded a polished turtle carapace fragment measuring 25.2 X 16.9 mm. (Hesse *et al.* 1975).

LC IIC (ca. 1300-1190 B.C.) Kition in the south produced a *Testudo graeca* carapace of an immature individual with a man-made hole in the centre of the shell (Reese 1985).

Enkomi in the east produced a broken but rather complete LC III (ca. 1220-1100 B.C.) *Testudo* carapace and attached plastron. The plastron has been cut at the anterior end (Spitzenberger, 1979) personal analysis by Reese). It was found in Area I, Well 3, Level 1740, and measures 14 cm. long and 11 cm. wide. The well is in the southwestern corner of Court 64 (Dikaios 1969:178).

Ten *Testudo* carapace fragments were found at LC III Hala Sultan Tekke in the Area 8 West Well F1750 at a depth of 7-8 m. (personal analysis by Reese).

THE RECENT EVIDENCE FOR TERRESTRIAL TURTLES

Unger and Kotschy (1865) report *Testudo marginata* as present on Cyprus. However, Boulenger (1888) queries this identification. Tortoises are not noted by other herpetologists who have worked on the island (Werner 1936; Birkenmeier 1953; Clark 1973; Schätti and Sigg 1989).

Demetropoulos and Hadjichristophorou (1981:13-14) found *Testudo graeca iberica* on Cyprus, but considered it to be a possible introduction. Reese (1985:409) noted that tortoises are not found on the island today.

Isolated specimens of *T. graeca iberica* and *T. marginata* have also been recorded by Demetropoulos and Lambert (1986) on the island since 1970. They also believed that these specimens probably arrived on Cyprus from Greece through translocation by Greek Cypriot residents and students who attended university on the mainland.

We can now report three specimens of *T. marginata* found in 1992 in the Eliades Mantarin orchard located one Km north of the city of Paphos. All three specimens were kept by the people who collected them; two later escaped into the area where they were collected. A fourth tortoise of the same species was found 1.5 Km north of this orchard in July 1993. Based on its much larger size, we believe that this was a fourth individual. This was the first time that such a large number of the same species of *Testudo* were found in one area, and may indicate that a small colony had established itself near Paphos.

This area is agricultural, but with the expansion of the city the habitat is diminishing. In addition, with the custom of the local people to collect the tortoises for pets, it would seem that this population does not have much chance of avoiding extinction.

Also, in the summer of 1992 there were five tortoises in the Zoological Garden of Limassol. Three of them were *T. marginata* and two *T. graeca*. The zookeeper could not trace the people that brought them to the zoo, but he was told that they were collected in the wild. In November 1992 another *T. marginata* was brought to the zoo which was found in a garden in Limassol.

Three *T. marginata* were also present at the Larnaca Zoo, however their origin could not be traced. These tortoises were stolen from the zoo in 1993.

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