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FIRST GREEN TURTLE NEST IN GREECE AND THE WESTERNMOST RECORD IN THE MEDITERRANEAN

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We report herein the nesting of a green turtle *Chelonia mydas* on Rethymno beach on the northern coast of the Island of Crete, Greece. Rethymno is known to host an important nesting area for loggerhead turtles in the Mediterranean. This 12 km long beach has been systematically monitored by ARCHELON since 1990. Monitoring activities include identifying and protecting nests through fencing and/or relocating. Nests continue to be observed until hatching, and when complete, they are excavated to assess clutch size, hatching success, in-nest mortality and other parameters affecting incubation. On 11 October 2007, during the post-hatch excavation of a nest identified through hatchling activity, it was observed that all dead hatchlings and the developed embryos within unhatched eggs had different morphological traits than those known for loggerhead turtles. This nest was laid at the westernmost end of the site (35°23'25''N, 24°36'21''E) and had not been identified during the egg-laying season probably because that section was backed by a large hotel resort and the track may have been destroyed by a third party before the arrival of the ARCHELON team. The nest had been deposited 1.5 m from the back of the beach, at a distance 16.5 m from the shoreline. At 58 cm, the egg chamber was significantly deeper than those typically constructed by loggerhead turtles. Total clutch size was 62 eggs, of which 24 were unhatched. Of the unhatched eggs, 18 contained dead embryos and 6 had no visible embryo. Of the 38 hatched eggs, 19 hatchlings were found half-hatched (pipped) with 5 dead and 14 still alive inside the nest. Three more hatchlings were found inside the nest of which 2 were dead. All hatchlings found alive were helped to the sea by ARCHELON observers. Three of the dead hatchlings were preserved in alcohol and subsequent inspection of the morphological characters of the samples concluded that they were *Chelonia mydas*. All hatchlings had 3 infra-marginal scutes, as well as 4 post-ocular and 2 pre-frontal scales on either side. Two of the hatchlings had 4 costal scutes bilaterally (typical for green turtles) but the third one had 5 costals on its left side; it is known however that this deviation is frequently observed in green turtles. This is the first record of green turtle nesting activity occurring in Greece. In the Mediterranean, the known nesting range of green turtles is restricted to its easternmost basin (Levantine basin), presumably due to higher water temperatures. Specifically, green turtle nesting occurs in southeastern Turkey, Cyprus, Syria, Lebanon, Israel, and Egypt with the westernmost boundary being Fethiye beach in Turkey (36°40'53.55 N, 29°04'29.03 E), about 430 km east of Rethymno. This observed green turtle nest in Rethymno extends the known range for the species in the Mediterranean and may be another indication of the incoming climate change in the region.