

Information about the Environment and for travellers in Crete:

2 new fossil sites from the Miocene of Crete

Outcrops within the prefectures Iraklion and Rethymno



In May 2005 the publisher determined 2 new fossil sites from the Miocene – aeon in South- and Central Crete, which are presented here as a brief description. The outcrops are from different structure which also applies for the fossil content. The findings are good; search intensity and stamina on-site affect the success. Further fossil sites of findings and -descriptions for Crete are published within the scope **CRETEEnvironmentInfo** – Fossils / Place of findings with the leaflets No. 011•04/E, 017•04/E, 036•04/E, 040•04/E, 043•04/E, 054•05/E, 069•05/E, 071•05/E, 081•05/E and 083•05/E.

Shells and sea-hedgehogs at the outcrop at *Tefeli*

The outcrop is located in Central Crete (Prefecture *Iraklion*) and is within reach as described below. Go South from *Iraklion* (via *Archanes*) towards *Pirgos*. In the course of this route you also pass *Tefeli*. The outcrop extends over a length of about 200 metres around 500 metres after the village entree.

The outcrop consists of a berm, which was cut in the course of a road construction (road enlargement). The fossils are found here in the about 3 m high embankment wall, which consists of bluish gray marly soil. The isolated, but not rare finds are mainly smaller shells in excellent preservation; their specific spectrum was not examined yet, which applies also to the sea-hedgehogs. Latter are usually in imprint conservation (with bowl remainders). Since the road-construction measures are completed, this outcrop might exist for a long time.



The pictures show the outcrop „on-site“ and fossil shells as well as a sea-hedgehog "in situ" in the bluish gray marly soil.

Botanical fossils at the outcrop at *Houmeri*

This outcrop is located in the West of Crete (Prefecture *Rethymno*) and within reach as described below. Following the “New Road” *Iraklion – Rethymno* bench off at *Roumeli* towards South to *Perama* and from there to *Houmeri*. Behind *Houmeri* you will reach a fork where you don’t go straight (towards *Kras-sounas*) but right towards West to *Passalites (Arkadi)*. The outcrop is located about 600 metres after this branch (within a bend to the right) right beside the road.



This outcrop looks like a small quarry which probably serves only occasional the quarrying. The sediments consist of differently thick, tiling limes, in which loose sediments are embedded. The fossils are only found within the tiling limes and consist only from botanical fossils; mainly wood and leafs. Animal fossils were (until now) not found. Within sight of this outcrop (more South) is another, larger quarry which is obviously commercially used. Unfortunately this could not be visited for timing reasons (which will be made later), so that we cannot provide information about possible fossil finds in this quarry.

Pictures: (7) *U.Kluge* / (2) *H.Eikamp* (05/2005) The fossils shown are in the collection of *H. Zachariadis*; *Kato Gouves/Duisburg*

GEO-Information I: Karst appearances

Karst appearances are natural phenomenons which characterize a karst landscape. Sinkholes, water swallower, *polje* (see leaflet No. 043-04/E), karst sources and karst caves belong to that.

For more detailed information about karst see: <http://en.wikipedia.org/wiki/Karst>

Pictures are showing karst formations on the Isle Crete.

