



**Informationen zur Umwelt und für Naturreisende auf Kreta:**  
**Information about the Environment and for travellers in Crete:**

**Fossils find spots on Crete**

Fossil find spot *Gouves II* (Miocene), North Crete



Referring to the leaflet No [011-04/E](#) of **CRETE EnvironmentInfo: Fossils find spots on Crete (Miocene)**, where we reported about the geologic-paleontological conditions of spots and its fossil content, follow at this point a further description of a find spot at *Gouves*, where also many fossils are found. Some of the findings (2004) are presented at below pictures and short descriptions. The place of discovery *Gouves II* is to be reached as already described within leaflet no. 011-04/E, follow the directions here up to the text passage: ...”until a sheep and goat farm is visible on the left”. Instead of the left turn, follow the road for another mile towards “Old” *Gouves*. There where the uphill road leads into the village, turn left into a “road” (hollow-way) which follows a brook bed and serves as left-hand /eastern ring road of *Gouves*. In some steep, up to 2.5 m high slope areas of the road are open Miocene layers, with only some but variety fossil findings.

To the below shown fossil remains, it should be noted, that it is not a pointed excavation with targeted search; it are invariably findings, made during a reconnaissance on site at single embankment sections.



**Picture left** is showing an outcrop (left the road) within the embankment of the field trip road. At this point is the finding place of 3

snake eggs where 2 have salvaged by *Gabriele Moschner*.

**Picture right** is showing the 2 snake eggs which are present in "Stone core conservation" and whose cavities are filled with loose sediment. The eggs have an average size of approx. 35 x 18 mm.

**Photos:** left: H. Eikamp / right: G. Moschner (07.2004)

Fossil snake eggs (*Squamaturum ovum*) are extremely rare and most publications go back to the time of 1850-1900, where the Oologie had its heyday. Due to the softness of objects fossil egg findings are rare and known only from a few monuments, e.g. Offenbach (Hessen/Germany), Neuleiningen and Gruenstadt (Rheinland-Pfalz/Germany) and Bouxwiller in France. The fossil snake eggs now found in Crete are comparable with the objects of these places, without exception handled in stone core conservation. This applies in particular (in addition to conservation form) to the egg shape (and there evaluation by the Szielasko´s quotient) and the ratio of egg value of longitudinal and width axis. A comparison of the fossil egg data with recent egg values indicates that the fossil eggs come from a snake which belongs under the recent scheme to the land and tree snake (*Colubridae*).

## References (in German only)

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The left figure shows an unusual find. It is the left flap from the inner view of the unequal flap clam *Monia patelliformis* (formerly *Pododesmus patelliformis*) from the family of Anomiidae (saddle oysters). It appears scattered in the Miocene; its main occurrence is in the Pliocene and in variations exists until today. From Crete is already one find known (see Literatur<sup>1</sup>). The right figure shows *Monia patelliformis* from outside. The shown exemplar has a very unusual sculpture: instead of radial groins or grid structures it shows knobs rows at regular intervals. Right-lateral of the vortex we find the grow point of substrate, without knobs structure. The shell is approx 4.9 cm wide, 4.1 cm long and 3.7 cm high.



Left Figure shows a variety of diverse fauna of this place of discovery. The conservation status is quite well. Right flap of a *Chlamys*; right flap of a *Ostrea* (they are the most common finds), the barnacle *Megabalanus sp.*, missing their both shutter flaps, approx 2x2 cm in size. 2 quill of a sea urchin, the largest one is broken but still 3.1 cm in length. Right Figure shows more representatives from the family Pectinidae: *Amusium sp.* (Miocene – today). You have the conspicuous straight edge with two ears. Shown are the flaps of two individuals. The bigger shell is 15 cm high and 11.9 cm in length. The larger flap is showing holes from the boring sponge *Cliona sp.* in the bottom left corner.



The figures show an irregular sea urchins living in the sediment *Conoclypeus sp.*, sidewise and seen from below. His presence is in the tertiary. The find is directly from the upcoming sediment in approximately 1.60 m high of a probably former, now laid open cistern duct. In contrast to the very sandy facies of the aforementioned finds this is more diagenetic consolidated and fitted with crasser gravel.

**Text and pictures** from Gabriele Moschner, Frankfurt am Main.

## <sup>1</sup> References (German only):

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The editor thanks Mr. *Dr. Ortwin Schultz* (Natural history Museum, Vienna) for assistance in determining individual fossils. Same applies for Mr. *Dr. Jens Lehmann*, University of Bremen.

Translated by Michael Bloechinger-Daeumling

[Art.-Nr. **2.838**, Zitat-Nr. **6.639**– impr. *eik.amp* 08/2004

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