Is geological heritage part of >nature<?

by

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Caring for the value of unique geological sites

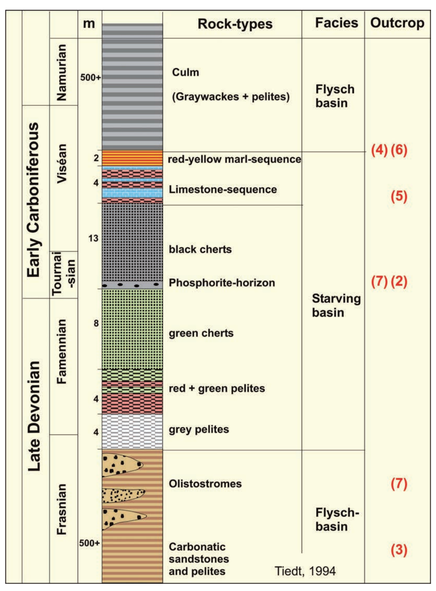
At Universities geology usually is part of Natural Sciences because of the relationship to biology, chemistry and physics. But when it comes to the protection of >nature<, e.g. in terms of the protection of biotops, geology is seldom considered. The introduction of the concept of geotopes and geoheritage in the 1990s and its increasing consideration during the last decades has made it somewhat easier also to protect unique geological sites. But this is not always working.

An example from Menorca

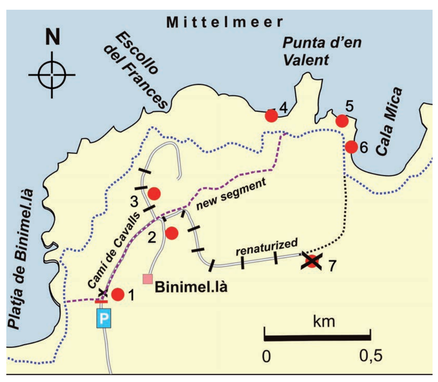
On Menorca the existence of Late Devonian and basal Carboniferous rocks was for a long time questionable because of the lack of known fossiliferous strata from that time period from 373 to ca. 340 million years. But then a unique site on the Binimel.là peninsula was found during geological fieldwork (see location point 7 on the location map). This profile contains a sequence of pelitic and siliceous deep sea sediments. Conodont microfossils collected from the surface of these mudstones and cherts could proof a continuous condensed sedimentation through the whole late Devonian into the lower Carboniferous (Meyer & Stoppel 1990; Tiedt 1994).

This unique geological setting was found in the vicinity of Binimel.là along a dirt road close to Cala Mica.

Stratigraphic Column of Frasnian to Namurian (after Tiedt 1994)

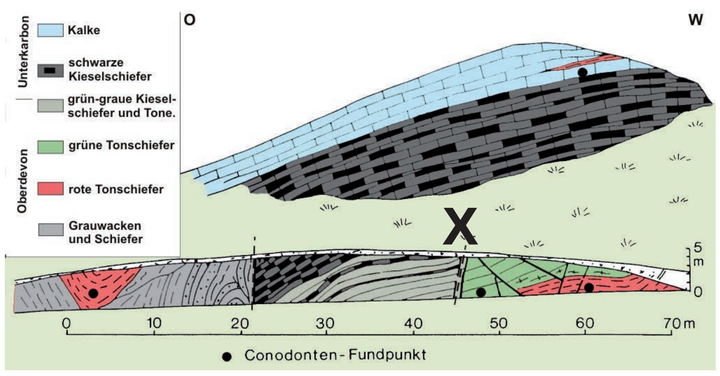


Location map



Conodont-bearing cherts (photograph taken April 2013)

Sketch of the outcrop of Paleozoic rocks (x = postion of photograph)



after Meyer & Stoppel(1990)

„Renaturation" activities between 2013 and 2014 destroyed this unique geological site with a cover of debris and the plantation of shrub.

November 2014: same site with debris-cover

Debris with plantation (within 0)

Our concern:
Renaturation activities should also take into account the value of unique geological sites.

References:

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Tessensohn, F. & Huch, M. (in press) Menorca. Wanderungen in die Erdgeschichte (35). Pfeil-Verlag München.
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