## Exploitation of Geo-Paleontological heritage: the example of Monte Subasio (Assisi, Umbria, Central Italy)

## Valorizzazione del patrimonio geo-paleontologico: il caso del Monte Subasio (Assisi, Umbria - Italia centrale)

BALDANZA ANGELA, VENTURI FEDERICO, FAMIANI FEDERICO Dipartimento di Scienze della Terra Università degli studi di Perugia abaldanz@unipg.it, venturi@unipg.it, federico.famiani@gmail.com

The Mount Subasio, located in central Umbria between Assisi and Nocera Umbra, is a Mesozoic carbonatic rocky hill, with a characterstic rounded shape similar to a totroise's back. It represents an important naturalistic and geo-paleontologic laboratory, useful for the knowledge and development of the "Environmental Ecology".

The "Monte Subasio Regional Park" promoted several popular events with the aim to increase the knowledge of the territory, the most relevant of which was the opening of the Ecological Laboratory of Geo-Palaeontology. This laboratory encouraged and stimulated the approach of the primary and secondary grade schools to the Earth Science disciplines: this, in turn, is a very important fact, because many local inhabitants still believe that M. Subasio is a volcano, due to the presence on its top of many "craters" (which actually are karst dolines)!!

The geological history of the Subasio is the same of the Umbria-Marche Apennine ridge. The lithotypes constituting the mountain are sedimentary carbonatic rocks of marine origin, and its present structure and geomorphology are the combined result of tectonic and karst alteration. This asymmetrical anticline dome is boarded on the western flank by a normal fault, while the eastern flank shows deeply inclined strata. On the mountain top, the sub-parallel exposure of carbonatic strata (mainly mudstones and marls, referable to the Scaglia Umbro-Marchigiana Lithostratigraphic Unit) and the lack of vegetation covering are the perfect situation for the karstification to start. As these processes go on, the result is the development of some usually funnel-shaped dolines, locally known as "Mortari" or "Fosse", the most known of which is called "Mortaro grande". For many centuries, these natural depressions were used as supplies of ice, and local people utilized the compressed snow for food preservation.

The above-mentioned Ecological Laboratory of Geo-Palaeontology, active from 2001, is an example of a little Science Museum, where all the basic aims (preservation, fruition and didactic support) are perfectly represented.

During 2006, over 500 people (tourists, families, amateurs, scholars, university students) visited the Museum, while more than 1000 students took part in its didactic activities.

The Museum is organized with three main exposition rooms: the first one is dedicated to the general paleontology (fossilization, geologic time and guide-fossils), the second shows the fossil ammonites found on the Mount Subasio and its typical Mesozoic rocks, while the third room is devoted to the comparison between the lower Jurassic fossil documentation of the Italian Apennines and those of some French and German localities of the same age. All these subjects can be easily followed by means of an inner and outer didactic route. The didactic offer comprises laboratory experiences on the sedimentation and fossilization processes, which enable the the students to learn "playing with sand and clay".