

Apuan Alps: a possible European Geopark in the Northern Apennines (Italy)

Giuseppe Ottria^{1,2}, Alessia Amorfini¹ and Antonio Bartelletti¹

1. *Consiglio Nazionale delle Ricerche, Istituto di Geoscienze e Georisorse, Via S. Maria 53, 56126 Pisa, Italy*
2. *Ente Parco Regionale delle Alpi Apuane, Via Corrado Del Greco 11, 55047 Seravezza (Lucca), Italy*

The region proposed as Apuan Alps Geopark is the area subject to environmental protection by the Nature Park of the Apuan Alps. It consists of the Apuan Alps, a mountain range at the north-western edge of Tuscany, in Northern-Central Italy. The area of the prospective Apuan Alps Geopark is made up of a fascinating orographic complex, whose fame is due to the beauty of its marbles as well as to the deep abysses and the large caves of the karst underground.

Representing a key area for the geologic history of the entire Northern Apennines, the Apuan Alps have long been considered a classical area of the Italian geology. In particular, the Apuan Alps constitute a tectonic window where the lowermost units of the Northern Apennines are exposed, being formed by a metamorphic complex originated during the Alpine orogeny.

Overall, the Apuan Alps display metamorphic and unmetamorphic rocks covering a long time span, from the Paleozoic basement to the Cenozoic foredeep sandstones. However, the rocks that characterize the Apuan Alps are the marbles occurring at different levels of the metasedimentary sequences.

As for mineralogy, the Apuan Alps are also one of the most interesting areas not only in Italy but even worldwide. They consist of about 200 mineral species, among which 18 were discovered in this region. The location of the Apuan Alps, the exposure and the different nature of the rocks gave rise to varied and contrasting environments, where both plant and animal populations are enhanced. Habitats, along with plant and animal species, that the European Community has found extremely interesting, have allowed the identification of a large SPA and ten SCIs areas directly related to the physical landscape and the geologic substratum. The Apuan Alps Nature Park, which proposes its territory for the membership of the UNESCO European and Global Geopark Network, has for years worked on several actions aimed at enhancing the knowledge of its geologic-geomorphologic heritage in cooperation with other public agencies and private companies.

References

- Carmignani L., Conti P., Disperati L., Fantozzi P.L., Giglia G., Meccheri M. 2000. Carta geologica del Parco delle Alpi Apuane, Università di Siena-Parco Alpi Apuane, scala 1:50.000.
- AA.VV. 2005. Geositi tra valorizzazione e conservazione della natura. Dalla conoscenza alla gestione dei beni geologici, *Acta Apuana*, Suppl. IV, 1-63.
- AA.VV. 2009. Geositi tra valorizzazione e conservazione della natura. La geodiversità delle Alpi Apuane, *Acta apuana*, Suppl. V, 1-119.