



Digital Course on UNESCO Global Geoparks 2021

UNESCO Global Geoparks and Sustainability



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Registration:
<http://www.petrifiedforest.gr/geoparks2020/>

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Murge and Pre-Murge in southern Italy: the last piece of Adria, the (almost) lost continent, attempting to become an aUGGp candidate (MurGEOpark)

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In 2019, the executive of the Alta Murgia National Park (southeastern Italy) decided to propose its territory as possible inclusion in the network of the UNESCO Global Geoparks. Since then, in cooperation with the Department of Earth and Environmental Sciences (Aldo Moro University of Bari) and SIGEA, it is working to candidate the area as an aUGGp (called "MurGEOpark"). The MurGEOpark comprises the Alta Murgia area, where a Cretaceous sector of the Apulia Carbonate Platform crops out, and the adjacent Pre-Murge area, where the southwestward lateral continuation of the same platform, being flexed toward the southern Apennines mountain chain, is thinly covered by Plio-Quaternary foredeep deposits.

The worldwide geological uniqueness is that the area is the only in situ remnant of the AdriaPlate, the old continent almost entirely squeezed between Africa and Europe. In such a contest, AltaMurgia is a virtually undeformed sector of Adria (the Apulia Foreland), while other territories of theplate are, and/or were, involved in the subduction/collision processes. In the MurGEOpark, the crustof Adria is still rooted to its mantle, and the Cretaceous evolution of the continent is spectacularlyrecorded in Alta Murgia thanks to the limestone succession of one of the largest peri-Tethyancarbonate platform (the Apulia Carbonate Platform). The MurGEOpark comprises also the Pre-Murge area, which represents the outer south-Apennines foredeep, whose Plio-Quaternaryevolution is spectacularly exposed thanks to an "anomalous" regional middle-late Quaternary uplift.The international value of the proposal is enriched by the presence of several geological singularities such as two paleontological jewels of very different age: a Neanderthal skeletonpreserved in speleothems within a karst cave, and one of the largest surfaces in the world withupper Cretaceous dinosaur tracks (about 25.000 footprints). Moreover, the close relationshipsbetween man and geology are spectacularly documented in the MurGEOpark: among the others,the use and conservation of water in a karst area, the prehistoric and ancestral choices ofurbanization, karst caves traditionally used as religious sites, etc. All these examples demonstratethehow the MurGEOpark could offer a good opportunity to spread the geological culture to a wide and diverse audience.

