

Global Geoparks in Greece

Global Geoparks are listed in order of acceptance into the Global Geoparks Network

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Lesvos Global Geopark, Greece

Geology: Lesvos belongs to the Pelagonian geotectonic zone of Greece which represents fragments of the Cimmerian Continent. The geological structure of Lesvos Global Geopark is composed of the Metamorphic basement, the nappe of the ophiolitic sequence, the Miocene postalpine volcanics, the Neogene marine and lacustrine deposits.

In the Western part of Lesvos the Lesvos Petrified Forest exists, which covers an area of 15.000 h. The formation of the Petrified Forest is directly related to the intense volcanic activity on Lesvos Island during late Lower Miocene. The Greek state recognised the major environmental, geological and palaeontological value of the area and declared the Petrified Forest to be a preserved Natural Monument (Presidential Decree 443/85).

Moreover in the area of Lesvos Global Geopark there are findings of the oldest known land mammal (*Prodeinotherium bavaricum*) 19 Ma in Greece, impressive fossils of animals that lived on Lesvos 2 Ma ago, numerous volcanic sites and thermal springs witnesses of the intense volcanic activity (21.5-16.2 Ma), faults and landscapes created from tectonism, caves and karstic structures, erosional forms and waterfalls as well as impressive coastal landforms.

Geography: Lesvos with an area of 1.636 km² and 370 km of coastline is the third largest Greek island, and the seventh largest in the Mediterranean. Lesvos is located in the NE Aegean Sea close to the coast of Asia Minor. The island has two major gulfs those of Gera and Kalloni. Its highest mountains are Lepetymnos and Olympus and the largest part of the eastern and central part of the island belongs to Natura 2000 Network.

The population of the island is 85.410 inhabitants (2011 census) a third of which lives in its capital, Mytilene, in the southeastern part of the Island. Mytilene is also the administrative center of the North Aegean Prefecture and it is the seat for the General Secretary of the Aegean & Naval Policy and for the University of the Aegean.

The local economy of the island is based on agriculture with an emphasis on olive oil production, cattle-raising and fishing. Distillery is developed and its main product is the world famous ouzo. Many of the island's inhabitants are professionally engaged in agrotourism.

Education and Sustainable Development: Educational activities lie at the core of the Global Geopark's operations. Environmental education programs organized for elementary and high school students in Lesvos Global Geopark cover a broad range of activities such as fossil excavation and conservation, nature observation, and bird watching. School visits are organized all year round, contributing to the local economy through the development of educational geotourism. Educational activities for local schools help raise the awareness of the local inhabitants as to the importance of the natural monuments and the conservation of the earth's heritage.

An important component of the Lesvos Global Geopark management plan is the support of the local economy. Several opportunities have been created through Geoparks activities for tourist enterprises, small hotels, guest houses, restaurants, and other enterprises such as local handicrafts artisans. It is worth to be mentioned that Lesvos Global Geopark collaborates closely with women's agrotourism cooperatives and every summer organizes an agrotourism festival, which promotes high-quality local products, food, and drinks prepared by the women's cooperatives.

Dates

Year of EGN membership entry: 2000

Year of GGN membership entry: 2004

Subsequent Revalidation: 2016

Official Website

<http://www.petrifiedforest.gr/?lang=en>

www.lesvosmuseum.gr

Contact

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Map of Lesvos Global Geopark



Map of Greece showing location and size of Lesvos Global Geopark



Psiloritis Global Geopark, Greece

Geology: The great variety of Earth processes that have formed Psiloritis Mountains, the fascinating geology, the exceptional natural environment and the vibrant culture and traditions of its people are all facets in the character of the Psiloritis Global Geopark. The Global Geopark is characterized by its superb and outstanding geology reflected by the variety of rock formations that comprise all rock types of Crete in a series of sheets. These are exposed in a number of excellent outcrops and cross-sections which provide an insight into Earth's mountain-building processes. Some of its spectacular natural monuments include the Permian fossilized corals and bivalves, the impressive "Vossakos" folds, the "Chonos" karstic formations, the breath-taking caves and the deep gorges of the mountainous area, as well as the ophiolites, the remains of the ancient Tethys Ocean. All these geosites host an extraordinary diverse flora and fauna.

Geography: Psiloritis Global Geopark is located in the island of Crete, Greece, extending over an area of about 1200 km². It covers the central part of the island including the entire area of Mountain Idi (Psiloritis) which is the highest in Crete, reaching up to 2456 m. The surrounding Talaia Ori Mountains that extend till the northern coast and the valleys of Mylopotamos, Messara and Amari are all included within its boundaries. The Global Geopark is administratively allocated in two Regional Units (former prefectures), that of Rethimnon and Heraklion, and within the limits of six municipalities.

Just at the borders of the Global Geopark is Heraklion, the largest city of Crete, which hosts the second per passenger and the first per charter arrivals airport in Greece, as well the second busiest harbour in the country.

Education and Sustainable Development: A great variety of educational activities are offered daily at Psiloritis Global Geopark in collaboration with the Natural History Museum of the University of Crete and the Environmental Education Centre of Anogia. Projects are addressed to all ages, from youngsters to elder people and to special target groups like the tourist guides and university students.

Further synergies have been developed with local enterprises of the Global Geopark resulting in a local quality label, the "Psiloritis Land" that characterises products and services of the territory. A plan for sustainable development is under implementation by the Management Committee supporting initiatives that focus on geotourism, local art and culture promotion, as well as strengthening local economy.

Dates

Year of EGN membership entry: 2001

Year of GGN membership entry: 2004

Subsequent Revalidation: 2017

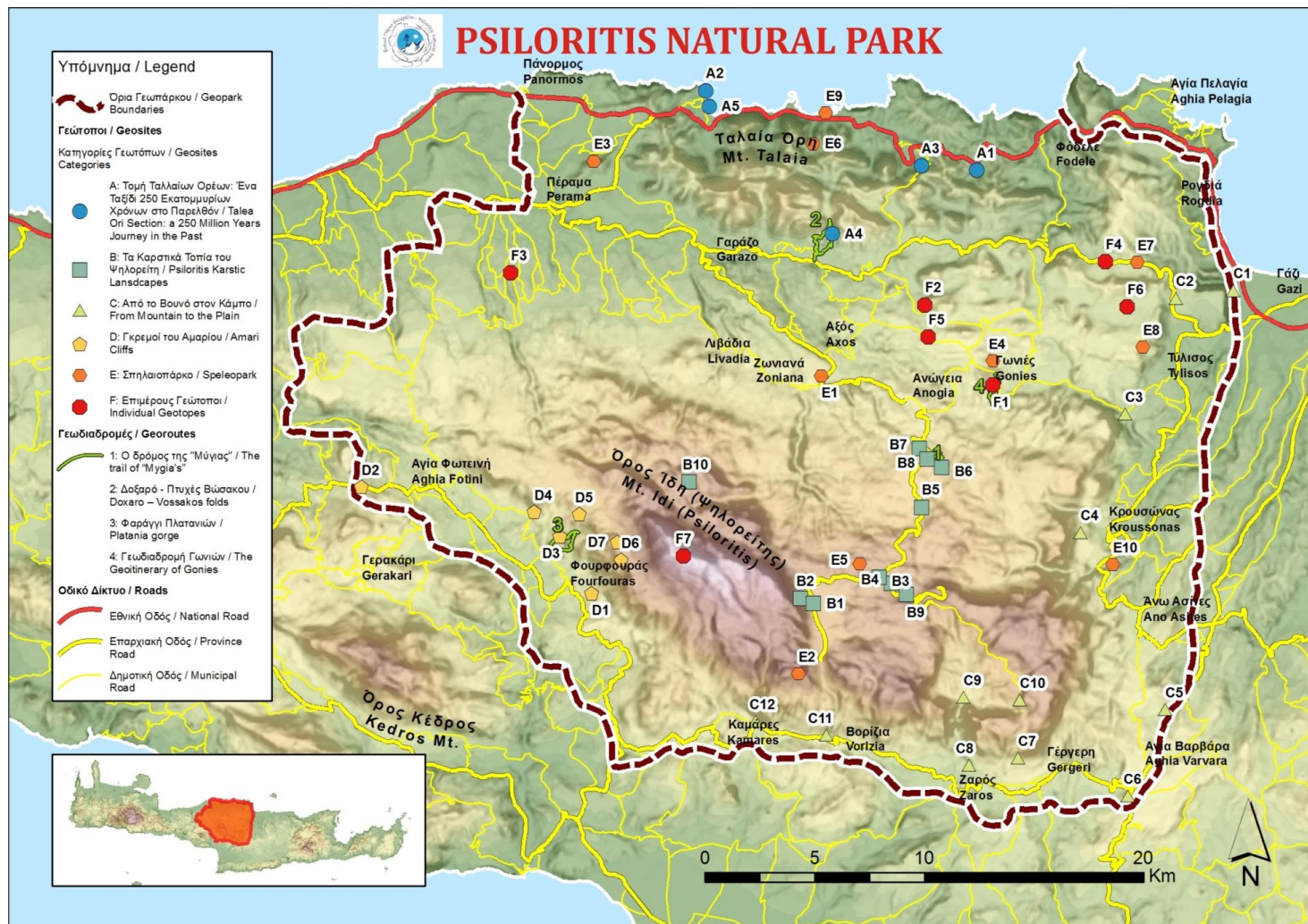
Official Website

<http://www.psiloritis-natural-park.gr/Home/2/1.html>

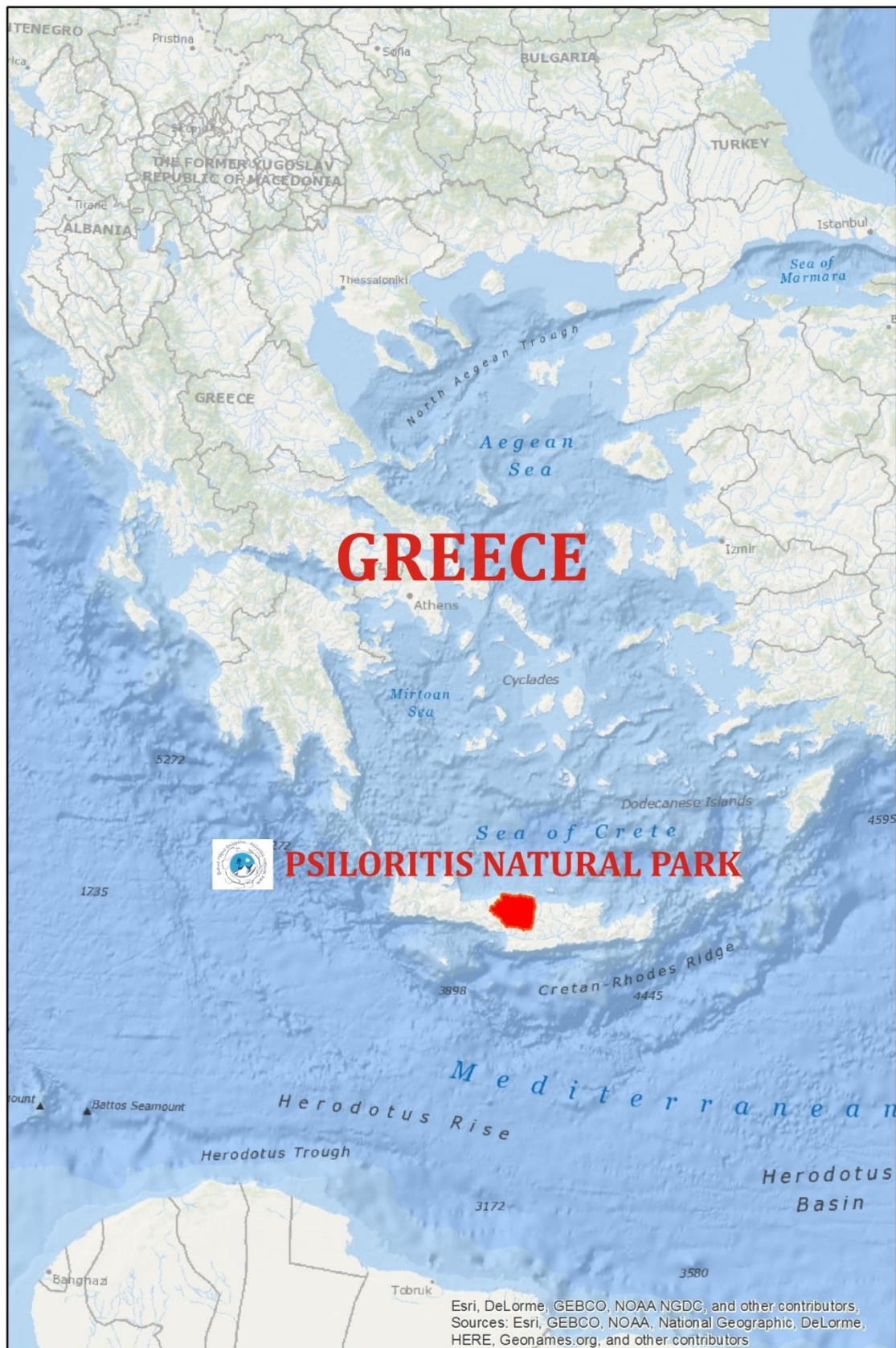
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Map of Psiloritis Global Geopark



Map of Greece showing location and size of Psiloritis Global Geopark



Chelmos Vouraikos Global Geopark, Greece

Geology: The alpine nappe sequence of the wider area of Chelmos Vouraikos Global Geopark is comprised of 3 alpine units, which from the lower to the upper are: 1) Arna unit, consisting of phyllites and quartzite series, 2) Gavrovou - Tripolis unit, consisting of the Tyros beds, a neritic carbonate sequence and flysch, and 3) Olonou - Pindos unit, representing all formations from the Triassic clastic formation at the bottom up to the Eocene flysch at the top. The Pindos unit is intensively folded and forms successive thrusts from east to west. Post alpine deposits are i) fluvial, ii) fluvial-lacustrine, iii) lacustrine, iv) fan delta, and v) marine. The lacustrine and the fluvial formations outcrop at the south, central and eastern part of the Global Geopark area, whereas the fluvial-lacustrine formations, the fan delta deposits and the marine deposits outcrop at the northern part.

Geography: The Global Geopark is located within two prefectures of N-W Peloponnesos, namely Achaia and Korinthia. The region is bordered by the following boundaries: In the North, it is defined by the National Road of Athens–Patras, while in the East, the border passes through the West end of the settlement of Trapeza. The Southern borderline is the road of Ancient Feneos –Planitero and Afrodissio Mountain. The Global Geopark occupies an area of 647 km², with 62 settlements, villages and towns.

Education and Sustainable Development: The Chelmos–Vouraikos Global Geopark offers presentations and possibility for discussion at its information center in Kalavryta. Through the years there have been numerous visits from Universities, schools and collaborating Environmental Centers from all over Greece. The visitors are informed about the geo- and biodiversity of the region, the legislation that applies to the area and actions undertaken for sustainable development and management and other important environmental matters. The intensive collaboration with the Environmental Education Center of Kleitoria – Akrata greatly improved our environmental education projects and outdoor activities with schools and groups working on several environmental projects. Every year, along with the Pan-Hellenic crossing of Vouraikos gorge, a public workshop is organized for the promotion of the protected areas, their protection, management and sustainable development.

Dates

Year of GGN membership entry: 2009

Subsequent Revalidation: 2019

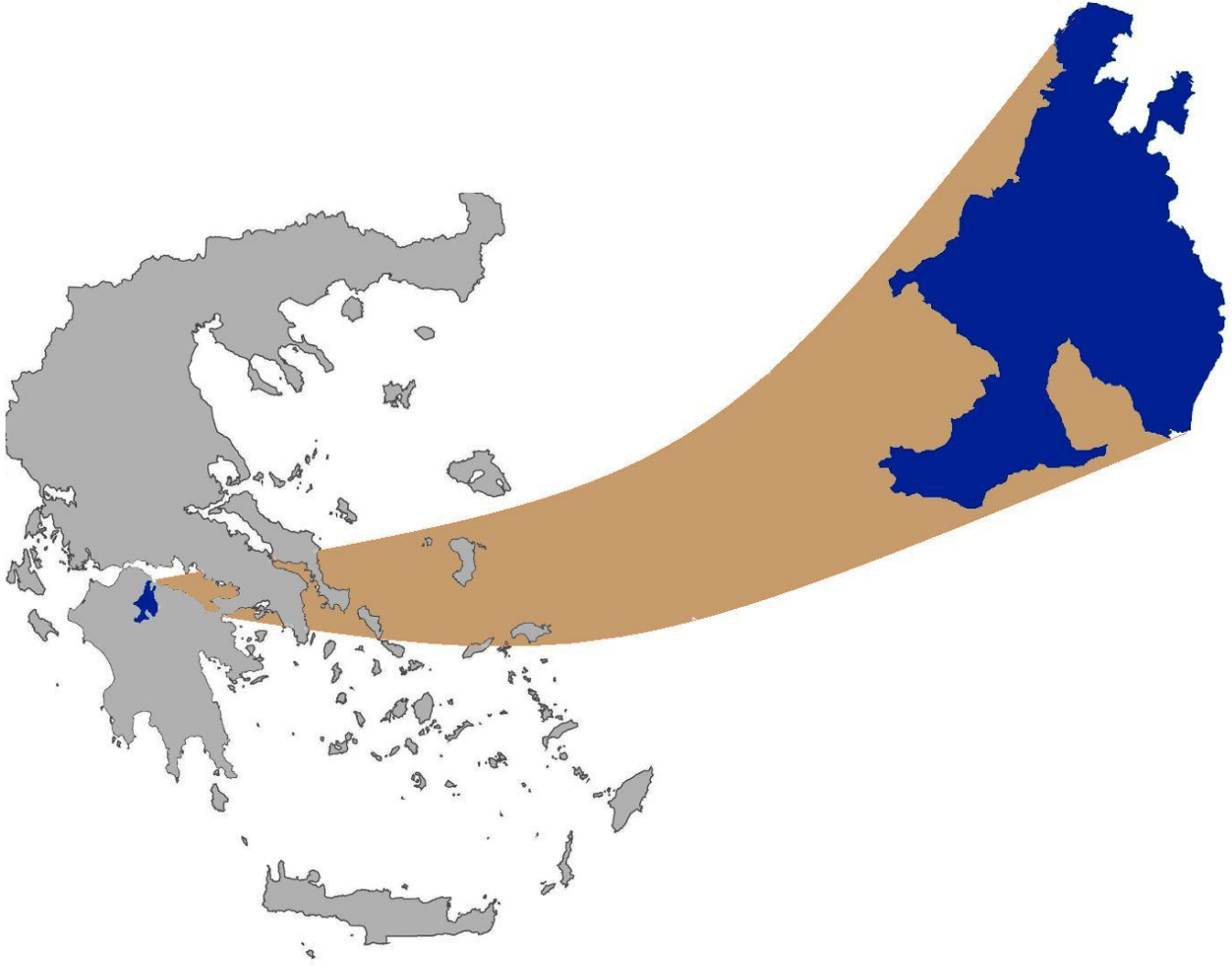
Official Website

<http://www.fdchelmos.gr/en/>

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Map of Greece showing location and size of Chelmos Vouraikos Global Geopark



Vikos - Aaos Global Geopark, Greece

Geology: The area is formed of sedimentary rocks belonging to the Ionian and the Pindos geotectonic zones. Part of the Global Geopark is belonging to an ophiolitic complex. The compressive stresses caused by the collision between the African and the Eurasian plates resulted in the creation of big faults, folds and thrusts. The masses of rocks of oceanic origin (ophiolites and accompanying sediments) are thrust onto the sediments of the Pindos zone and which are in turn thrust on the sediments of the Ionian Zone. The Vikos–Aaos landscape reveals karstic features which were covered by glaciers at intervals during the Pleistocene. The alternating glacial and interglacial environments and the geodynamic processes which created fast ascendant movements resulted in favorable conditions for intense erosion, leading to deep gorges that reveal the stratigraphic column of the rocks.

Geography: The Global Geopark is located in the Epirus Region, in Northwestern Greece and is within the administrative boundaries of Konitsa and Zagori municipalities and covers an area of 1.217,7 km², in which 62 settlements or small towns are located. It comprises mainly a mountainous area with impressive landscapes. The higher mountains are Smolikas (2.637 m) and Tymfi (2.497 m). Two large impressive rocky canyons have been shaped from the Vikos and Aaos rivers. The main land use is forestry and farming. The Vikos – Aaos area was legally declared as National Park in 1973. Agriculture is taking place mainly at the rich soil of the plain of Konitsa, while forestry at the thick forests of the mountains of Zagori and Konitsa. Livestock keeping is taking place everywhere and a significant part of it is characterized by the traditional transhumance pattern.

Education and Sustainable Development: Tourism is one of the main economic factors and several hotels and hostels as well as 3 popular mountain refuges exist in the area. Hiking, climbing, rafting, kayaking are the most popular recreational activities. The Pindus National park staff (70% of the Global Geopark surface overlapped with the NP) and the Environmental Education Centre of Konitsa, having their base in the Global Geopark, participate constantly in education activities. The 2 information centers and 5 open interpretive routes as well as the 2 Pindos National park information centers support the awareness of both locals and visitors. In addition workshops, events and educational courses about the Global Geopark values are organized for the locals and schools. The leading agency of the Global Geopark, the Epirus Development Agency, is focusing on sustainable development of the rural areas, using the Global Geopark as a model.

Dates

Year of GGN membership entry: 2010

Subsequent Revalidation: 2016

Official Website

www.vikosaaosgeopark.com

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Map of Vikos - Aaos Global Geopark



Map of Greece showing location and size of Vikos - Aaos Global Geopark



Sitia Global Geopark, Greece

Geology: The geology of Sitia Global Geopark includes distinctive characteristics that make it unique and of international value. The abundant Pleistocene mammal fossil sites, the discovery of three *Deinotherium giganteum* fossils, the extensive cave systems, as well as the palaeo-shorelines of Zakros area are unique for Crete and of national importance. Almost all rocks in the region are of sedimentary origin, a fact that indicates the existence of several kinds of fossils and few significant mineral resources. Fern remnants of carboniferous age are to be found in some place, several species of Pleistocene mammals (deer, hippos, elephants etc.) along the coastal zone, whereas a great number of marine fossils exist within the Neogene sediments. The most profound geological feature of the area comprises the abundant karstic structures on the limestone environment. In the broader region more than 170 caves and many gorges have been recorded to date. This unique speleological park is a real paradise for speleologists, biospeleologists and other researchers of the subterranean world.

Geography: Sitia Global Geopark is on the easternmost edge of Crete, in the Municipality of Sitia. The total area of the Global Geopark is 517 km² and it covers the former Kapodistriian Municipality of Itanos, as well as parts of the former Municipalities of Lefki and Sitia. Geographically, it extends from cape Cavo Sidero, in the north, to the southern coast of the Municipality, the edges of the city of Sitia, to the west, and the coast of Zakros, to the east. It is mainly a mountainous area, with the Zakros Mountains dominating the landscape and the lace-like coastline all along the shores.

Education and Sustainable Development: Inside Sitia Global Geopark, various activities and infrastructure for the support of geotourism and ecotourism have been developed. The most important of them concern the creation of the local Natural History Museum of Zakros and the Speleological Centre in Karydi, the production of printed and electronic materials and the signposting and promotion of a series of geotrails throughout the expanse of the Nature Park, connecting geological monuments, habitats, as well as historical, cultural and other tourist sites in the area, with the beautiful hamlets of the Park.

Educational activities in Sitia Global Geopark are offered both by the Park's staff and the Environmental Educational Center of Ierapetra which is located just southwest of the Park at the town of Ierapetra. Under a transnational project, two educational projects have been developed in the form of museum kits that are available at the two centres.

Dates

Year of GGN membership entry: 2015

Subsequent Revalidation: 2019

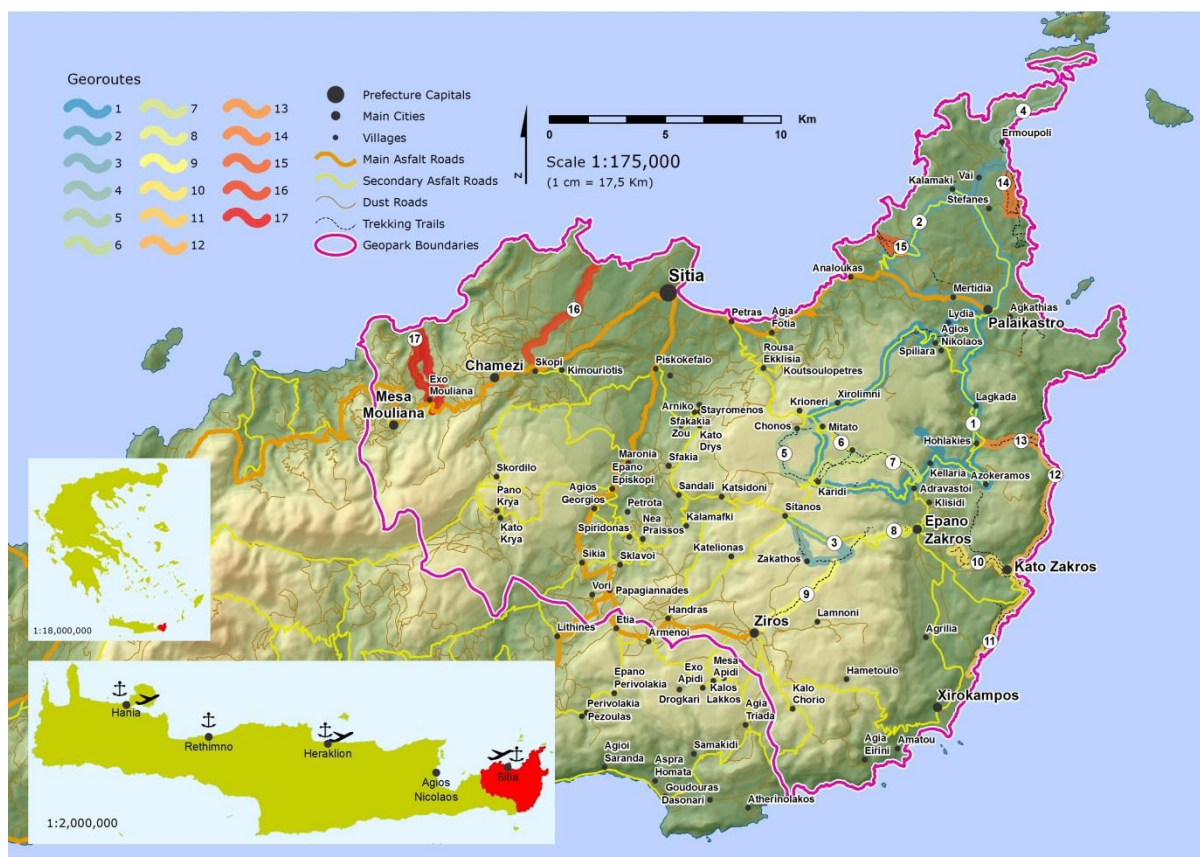
Official Website

<http://www.sitia-geopark.gr/>

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Map of Sitia Global Geopark



Map of Greece showing location and size of Sitia Global Geopark

