

 <p>United Nations Educational, Scientific and Cultural Organization</p>	 <p>UNESCO Global Geoparks</p>	<h2 style="margin: 0;">Applicant UNESCO Global Geopark</h2> <h3 style="margin: 0;">Geopark Mangistau, Kazakhstan</h3> <h2 style="margin: 0;">geographical and geological summary</h2>
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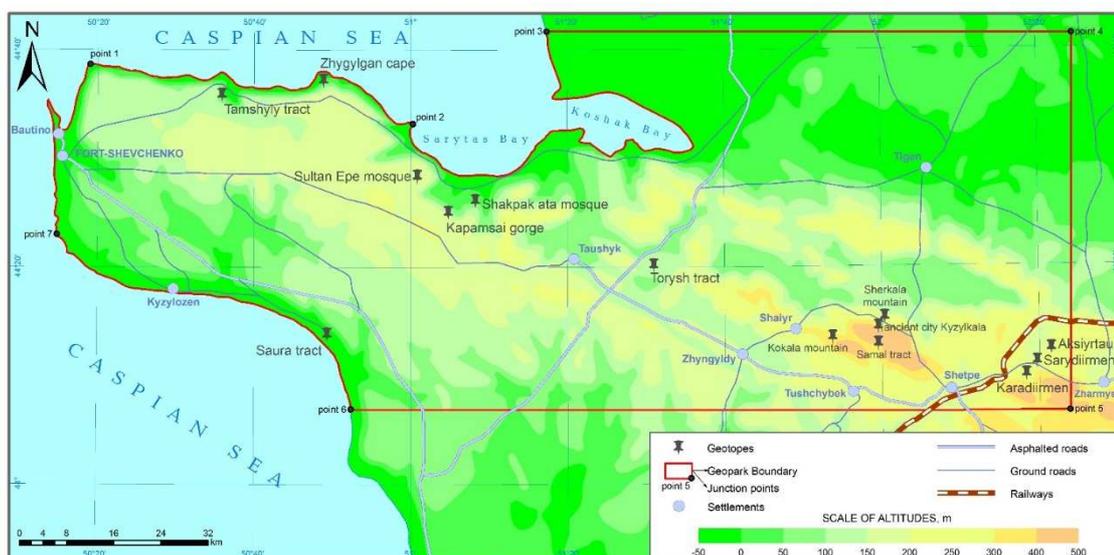
Please replace the map below with a map of your region, using a [standard UN map](#) showing the location of the aspiring UNESCO Global Geopark as shown in this example.



Aspiring UNESCO Global Geopark Mangistau

Please replace the map below with a map of the aspiring UNESCO Global Geopark indicating the boundary, cities, general geographic points, as shown in this example.

Map of Mangistau Aspiring Geopark



## 1. Physical and human geography- 1500 characters

*Including for example: location, geographical coordinates, surface area, distance to main cities/to the border, landscape, relief type (mountain, plains, valleys, caves...), maximum and minimum elevation, climate, nature, administrative region and country, number of inhabitants, economic activity, settlements, infrastructure, etc.*

Mangystau Geopark is situated in the west of the Republic of Kazakhstan in an arid zone and occupies the territory on the shore of the Caspian sea, embracing part of the Mangystau peninsula and Tupkaragan peninsula. The geopark occupies two districts – part of Mangistau district and part of Tupkaragan district of Mangistau Region. The distance between Shetpe village to Aktau city is 158 km. The geopark borders Busaschi peninsula in the North, plateau Mangistau in the South, Caspian sea in the West and Western Chink of the Ustirt in the East. The maximum elevation is 532 m, minimum is below zero. The territory is occupied by deserts and semi-deserts. The desert climate prompts the formation of a typical desert relief, with markedly pronounced erosional and aeolian processes. The relief varies considerably and includes mountains, plains and depressions. Range relief, ridge and cuesta forms of Karatau belong to low hills. Climate is sharply continental. Population is 22 835 people. Large settlements include Fort-Shevchenko city, Bautino and Shetpe. Economic activity includes: livestock farming, extraction of construction materials and fisheries. Agricultural lands are used as grazing lands. The development of Fort-Shevchenko city - which is regarded as a promising industrial and service centre with specializations in transportation and servicing, the construction industry, fisheries and agro-industry - is stipulated in the strategic plan for the region's development. Infrastructure includes roads of national importance, ethnic village, hotels and guest houses in Shetpe village. Shetpe village is the administrative center of the geopark and is located at 44°10'00" N and 52°07'00" E.

## 2. Geological features and geology of international significance – 1500 characters

Mangistau geopark covers three geomorphological areas: mountainous Mangistau, dissected plateaus and low-land plains. Geology of Paleozoic and Mesozoic-Cenozoic eras are forming the geological structure of Mangistau: Perm, Triassic, Jurassic, Cretaceous, Paleogene, Neogene and Quaternary. All the geological eras are represented by sedimentary formations, including coal bearing and oil-and-gas bearing formations.

Permian and Triassic rocks are exposed within the ranges of the western, eastern Karatau and Karataushyk, where they form the nuclear part of the anticlinal folds. The formations of the lower and upper Cretaceous (K<sub>1-2</sub>) create low-lying parts of the relief around these mountain structures. Deposits of the Upper Cretaceous and Paleogene are exposed on the slopes of the mountains and the watershed surface. In addition, the Lower and Upper Cretaceous deposits are exposed in the anticlinal structures of the Khanga-Baba and Tubezhik valleys on the Tubkaragan Peninsula. The deposits of Oligocene and Neogene are widely distributed on the Tubkaragan Plateau and the Southern Plateau of Mangistau.

Organic fossils such as ammonoids, oysters, shark teeth are found in all stratigraphic layers.

Oil and gas bearing Jurassic deposits are of great interest with 13 productive layers. The valley of spherical concretions with 4,5 m in diameter spread over hundreds of km.

66 million years ago between the Cretaceous and the Paleogene a global catastrophe took place. A large asteroid collided with the Earth in the area of the Gulf of Mexico. Mangistau is one of a few places around the world where the iridium anomaly was discovered, first in the USSR.

Huge cave mosques carved in Cretaceous deposits and dated to X-XV c to be found nowhere in the world.