

Geomorphology at Maricá APA

In the Maricá Environmental Protection Area (APA), located in the municipality of Maricá, in the state of Rio de Janeiro (Brazil), environments were mapped, based on high-resolution images obtained by drone, comprising a total area of 5,874 km². The geomorphology of this plain is characterized by the presence of the imposing Maricá Lagoon and two sandy barriers separated by a series of small sedimented lagoons.



Maricá APA area has a considerable biodiversity, with about 408 species of endemic flora and fauna and endangered, archaeological sites and some mineral resources.

Maricá Lagoon

Atlantic Ocean



One of the most notable characteristics of the dunes refers to the size of the grains, with the predominance of the sand fraction thick, although the dunes are commonly formed by sediments in the fine sand fractions.



Note the occurrence in the expanded area there is the predominance of hectares of native vegetation of the sandbank ecosystem, compounds of a coverage of creeps and herbs.

In the APA coastal plain there is the presence of two sandy barriers, separated by a series of small sedimented old lagoons (3), whose circular format can still be observed. The sandy barrier (2) closest to the beach was formed in the Holocene period around 3,700 years ago, and the external barrier (1) was formed in the Pleistocene period 120,000 years ago approximately.



- 1 Pleistocene barrier**
- 2 Holocene barrier**
- 3 Sedimented old lagoon**

