

Muroto UNESCO Global Geopark

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Muroto UNESCO Global Geopark is a place where the "birth of the earth" through plate tectonics can be seen before the viewer's eyes. These sights include Paleogene-Neogene accretionary complex, marine terraces formed by sea-level changes through glaciation in the Quaternary and by continual coseismic crustal movements, and emergent coastal landforms associated with major earthquakes. Japan, located on an active margin where four tectonic plates interact, is one of the most earthquake-prone and volcanic countries in the world. Even in this environment, Muroto Geopark stands out as a representative area of the mobile belt. The Shimanto belt, which offered the first on-land proof of the theory of plate tectonics, can be observed up close. In addition, subduction zone earthquake which occur every 100 to 150 years, along with the concomitant rising of the earth's crust -which occurs at the astonishing rate of approximately 2 m every 1,000 years -have brought about remarkable topographical changes, with major impact on the lives and livelihoods of the area's inhabitants.

The special characteristics of Muroto UNESCO Global Geopark are not limited to its geological and geomorphological heritage; another major point is how these are utilized with such wisdom by the local inhabitants in sustaining their livelihoods. For example, agriculture thrives on the level surfaces of the terraces, taking advantage of the topography, the soil's good drainage and long hours of sunlight. The land surface of Muroto is raised up by 1 to 2 m by subduction zone earthquakes. In the past, it has been necessary to re-excavate fishing ports in the area that shallowed after the earthquakes in order to put them back into operation. In this way, we see how Muroto is an area which functions as a locus of preparedness for the geohazards, a locus of strong resilience after disasters, and a locus of the application of resources that became available as a result of disasters.

In recent years, as a series of major earthquakes and tsunamis have occurred at the active margins, along with other large-scale geohazards such as volcanic eruptions, it has become apparent that Muroto UNESCO Global Geopark's mission is to tell the world how to live in a mobile belt, leaning from the people living in this drastically and constantly changing environment.

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