

Marine Protected Areas

For the conservation of biodiversity

The oceans make up a total of approximately 70% of the total surface of the earth.

The oceans reveal a fascinating biological diversity, which still remains largely unexplored.

The many facets of life, enormous species diversity and vast amounts of natural resources make the habitat from the coast to the deep sea so significant from an ecological point of view. As a result of rampant overfishing, degradation and the destruction of important and rare marine ecosystems and zones in coastal areas such as seagrass beds and mangrove forests, all the biologically important factors and the resilience of these ecosystems are endangered. Many fish and plant species are becoming rarer and at risk of becoming endangered species. The fact is that the oceans are increasingly used as an economic area for humans; they are occupied and threatened by human use. It is important to maintain the necessary measures and initiate further actions to protect, receive and stabilize the biodiversity of these habitats. However, the establishment of these protected areas is also associated with costs and not everyone or every nation wants to invest this money, and the costs cannot always be covered by the revenue from tourism.

In total, there are around 5000 marine protected areas (MPAs), which have a total area of approximately 2.6 million square feet. The tenth CBD - contracting state conference 2010 in Nagoya, adopted the Strategic Plan for Biodiversity 2011-2020, which follows the target to

preserve, up to the year 2020, at least 10 percent of the coastal and marine waters with the help of representative and networked systems of marine protected areas. Currently only about 2 percent of marine waters worldwide are designated as MPAs. This 2 percent is home to a significant proportion of global and still largely unexplored biodiversity, with unique habitats. The successful establishment of several marine protected areas has demonstrated that the density of certain fish stocks has rapidly increased by more than 15 times. The establishment of further zones has also clearly shown that the catch rates increased significantly and the ecosystem remained productive in terms of its biomass.

„The Great Barrier reef marine park“ is a model for successful marine management. It stretches more than 2000 km along the eastern coast of Australia (Queensland). For each of the four management zones, there are 3 types of use that are adhered to: general use zones, national park areas, and wildlife conservation and research areas. It creates an enormous ecological diversity of fringing reefs, coral reefs and continental islands.

Because fishing and recreational fishing are prohibited, the biomass of fish species is increasing. Now, the reserve has an extremely high biodiversity and attracts many tourists from around the world.

After the introduction of the FFH-Guidelines on the conservation of natural habitats, Germany expanded its marine protected areas in 2006. Around the island of Helgoland all the reefs and kelp forests with their typical flora and fauna are under protection. An example of this is the Dogger Bank (169,895.35 ha), a sand bank

in the North Sea, which lies between the UK and Denmark.

In Italy, the „Parco nazionale dell'Arcipelago Toscano“ is the official largest Marine Protected Area. The National Park covers the coastal areas and the main islands of the Tuscan archipelago. Thailand also hosts a variety of protected areas. The Marine National Parks are located along the coast of the Gulf of Thailand and the Andaman Sea. The biggest Marine National Park of the Philippines is called „Siargao Islands Protected Landscape and Seascape“ and is located off the northeast coast of the island of Mindanao.

The United States is extremely committed to the extension of such areas.

The National Marine Sanctuary System of the United States consists of 14 marine protected areas.

Two examples are:

Channel Islands National Marine Sanctuary - includes the islands Anacapa, Santa Cruz, Santa Rosa, San Miguel and Santa Barbara

Cordell Bank National Marine Sanctuary - Seamount northwest of San Francisco

Other marine protected areas include the north-eastern coast of Greenland, some marine areas in southeastern Australia, and on the west coast of England.

The protection of these areas is necessary for the regeneration of fish stocks, possible increases in revenue from tourism for coastal populations, as well as the maintenance of vital ecosystem functions.

Exercise 1.)

The text works with some examples of marine protected areas.

Mark the the approximate location of the listed Marine Protected Areas on the world and European map (page 3). You can use an atlas.