

Nature-based reef solution for coastal protection and marine biodiversity enhancement

LIFE NatuReef, a pioneering European project, aims to revitalize coastal ecosystems by reintroducing natural oyster reefs and sabellaria colonies at the mouth of the Bevano stream. This innovative endeavor seeks to protect the coastline and enhance biodiversity within the Upper Adriatic coast's non-urbanized stretches, nestled within the protected area of the Po Delta Park.

The project's core objective is to demonstrate best practices in ancient reef restoration, harnessing the ecological benefits of oysters and sabellaria. These bioconstructors, once prevalent but now rare, create intricate three-dimensional habitats that support a plethora of marine life. Through continuous filtration, they improve water quality and sequester carbon dioxide, contributing to environmental sustainability.

Moreover, the reefs' natural structures mitigate coastal hazards, including erosion and storm surges, safeguarding crucial habitats such as nesting grounds for plover birds and sea turtles. Their adaptability to climate change further underscores their significance in bolstering coastal resilience.

Over its four-year duration, the project will conduct comprehensive surveys to design reef placement and dimensions, considering factors such as depth and hydrological conditions. Limestone fragments will provide a foundation for oyster settlement, facilitated by collaboration among biologists, ecologists, geologists, engineers, and topographers from the University of Bologna, the Municipality of Ravenna, the Po Delta Park, and Proambiente.

The Flaminia Foundation, through its CIFLA Innovation Center and the Ravenna Technopole, will spearhead communication efforts, ensuring engagement with local communities and industries. Citizen involvement will play a pivotal role in monitoring and safeguarding coastal habitats throughout the project's lifecycle.

LIFE NatuReef represents a beacon of hope for coastal conservation, fostering collaboration across disciplines and empowering communities to protect our marine heritage for generations to come.

Website: <https://site.unibo.it/life-natureef>

FB: LIFE NatuReef

IG: LIFE.NatuReef.Project

Contact Coordinator: Prof. Massimo Ponti: massimo.ponti@unibo.it