

PRESS RELEASE

A review on the long-term programs of artificial reefs in Europe

Artificial reefs technology has become an important tool for fishery enhancement, marine conservation and (hence) coastal zone management of marine living resources worldwide. The deployment of man-made structures (e.g., concrete modules, decommissioned ships and offshore oil/gas platforms) to create new habitats for the development of marine communities are step-by-step becoming a common practice along the coast of all Continents to support artisanal and recreational fishery, sub-aquatic tourism, aquaculture systems and to protect the marine environment.

An interesting article of Gianna Fabi from the Institute of Marine Science in Ancona (Italy) with co-workers from France, Spain, United Kingdom, Turkey and Greece, has recently been published in a special volume of the Brazilian Journal of Oceanography dedicated to artificial reefs. The authors gave a general overview of the materials, designs, uses and effects of 19 different types of ARs deployed all around the European continent, starting in the late 60s in France.

Following the guidelines established by conventions to avoid pollution of the seabed against dumping of hazardous materials, long-term national programs of AR in European seas are now being conducted with different purposes. They are mostly concentrated in the northwest Mediterranean coast off Spain, Italy and France to restore and protect fish nursery grounds and natural ecosystems (e.g., the seagrass beds of *Posydonia oceanica*, coralligenous grounds, sea caves) against illegal trawling and/or to fix offshore mariculture grounds of mussels and algae. Due to the overall oligotrophic nature of the west Mediterranean Sea artificial reefs were also designed to support the diving tourism in order to deviate its impact on natural habitats. Throughout the review, the authors describe each regional reef program in terms of reef materials, designs, purpose, and raised the lack of post-deployment monitoring of most of them.

Since its first record in Japanese documents of the 17th century, man-made deployment of hard materials have been long ago just associated with fish traps for artisanal fishermen, which basic principle were applied to the large scale Fish Aggregating Devices (FADs) of the commercial fishery in the second half of last century. But now its concept and applicability has developed to the point that it became an important research line in Marine Sciences, with great applicability in the management of living resources in coastal zones.

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