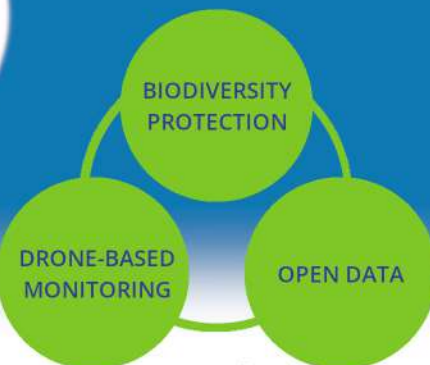


SUSHI DROP KEY MESSAGES



Reliable and up-to-date information about the state of marine resources is essential to support sound management decisions: to this extent, **SUSHI DROP** fosters the adoption of sensorized underwater vehicles to monitor the sensitivity of Adriatic species and habitats to fishing pressures.



PROJECT DURATION
01/01/2019 - 30/06/2021
30 Months



PARTNERS
6



ERDF
1.34 mln €



TOTAL BUDGET
1.71 mln €



PROJECT PARTNERS



LEAD PARTNER CONTACT

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Contact person: Luca De Marchi
l.demarchi@unibo.it

Photo: Antonio Rossetti and SUNCE Archive

European Regional Development Fund

SUSHI DROP

Sustainable fisheries with
DROnes data Processing



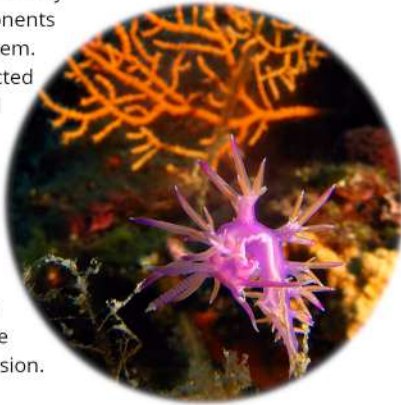
**PROTECT THE ENVIRONMENT
WITH NOVEL UNDERWATER
TECHNOLOGIES**



PROJECT CONTEST

Adriatic continental shelf bounded between Croatia and Italy is one of the seas with highest productivity and biodiversity and hosts habitats requiring special conservation and management measures because it is also heavily affected by human activities such as fishing, aquaculture, tourism, hydrocarbons extraction, river pollutants, global warming risks. Reliable and up-to-date information about the state of marine resources is essential to support sound management decisions for the protection of ecologically important areas. Thus, there is an urgent need to develop accurate and non-invasive methods for mapping the marine ecosystems to establish their condition, extent and geographical location.

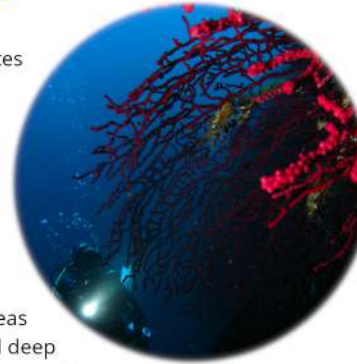
In this context, the SUSHI-DROP project evaluates the adoption of drones, i.e. **unmanned underwater vehicles (UUVs)** equipped with sensors to monitor physical, chemical and biological features. The challenge is to improve the knowledge on the bottom and benthos community, in order to correctly evaluate and manage pressures and impacts of human activities on such key environmental components of the marine ecosystem. The information collected during this project will allow implementing the most suited conservation procedures such as proposal of new protected areas, or new Natura2000 sites taking into account the transboundary dimension.



GENERAL OBJECTIVE

The SUSHI-DROP project evaluates the adoption of **unmanned underwater vehicles (UUVs)** equipped with sensors to monitor physical, chemical and biological features. This system allows to monitor the environmental status and estimate in particular fish abundance indices in marine areas characterized by rocky reefs and deep waters, in which the classical fish sampling procedures are ineffective or inapplicable.

A strong accent is kept on the characterization of the ecology of larval and juvenile stages and stock recruitment relationship of small pelagic and demersal fish relevant for fisheries and an open access platform will be created to make available habitat mapping data.



SPECIFIC OBJECTIVES

1. Implementation of the UUV platform for biodiversity monitoring

First step consists in the analysis of the current generation of UUVs and the available sensors on specifications related to the Adriatic habitats.

2. Implementation of a data-rich and open access Geographic Information System (GIS)

Implementation of an open access database providing to researchers, NGOs, people involved in the blue economy, and policy makers data collected in the UUV-based monitoring campaigns together with the associated estimation of fish stock abundance indexes.

3. Monitoring the biodiversity of relevant ecosystems

Exploitation and testing of the UUV technology to characterize through large scale scientific surveys the biodiversity of at least two relevant ecosystems in order to promote the adoption of measures for biodiversity preservation. Natura2000 sites suitable for the analyses have been identified. At the end of the project, the information collected will be the ground basis to propose protection measures for the considered ecosystems.

For more information please visit www.italy-croatia.eu/web/sushidrop

