

## SAHFOS, Home of the Continuous Plankton Recorder

# SAHFOS, The Sir Alister Hardy Foundation for Ocean Science

### "MONITORING PLANKTON AND BIODIVERSITY IN THE MEDITERRANEAN SEA" PROJECT

The boat "Mediterranea" has been made available for SAHFOS to conduct the research project: "Mediterranea, an expedition for marine life: mapping plankton diversity hot spots".

The Mediterranean Sea has been recognized as **one of the major reservoirs of marine and coastal biodiversity**. Although it makes up less than 1% of the global ocean surface, up to 18% of the world's macroscopic marine species are found there, of which 25 to 30% are endemic.

The coasts of the Mediterranean are under constant and growing human pressure, caused by the activities of 150 million residents and the arrival of 200 million tourists every year. The intensive urbanization, the overexploitation of resources, the proliferation of introduced species (via marine transport or through the Suez Canal) and pollution have significantly altered the Mediterranean biodiversity.

Consequently, the Mediterranean is considered to be **one of the most threatened centers of biodiversity.** Assessing the conservation status of species in the Mediterranean and adjacent seas, is relevant to regional and European policy instruments, particularly for the implementation of the new EU Integrated Marine Policy. **Though, no information is yet available on the marine biota in many regions of the Mediterranean basin**.

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The project aims <u>to assess and compare biodiversity of marine plankton across the Mediterranean, Black</u> Sea and northern Red Sea, based on samples collected during the "Mediterranea Expedition"

Plankton will be collected in continuous, towing a 'small plankton indicator' (4cm mouth Ø, 270µm mesh) at surface behind the boat and on the water column, using a small net in some reference spots. The sampling will be particularly frequent in regions where data on plankton are not yet available (e.g. North African coast) and in the areas where information on plankton are available on regional scale thanks to previous oceanographic expeditions (e.g. north-western Mediterranean).

Plankton samples will be stored on board and periodically sent back to SAHFOS for the analysis of phytoand zooplankton, so that the list of recorded species will be regularly updated and made available to the scientific community, stakeholders and public opinion in a 'plankton bulletin'.). At the end of the project the main eco-regions and hot spots of marine plankton biodiversity in the Mediterranean and adjacent seas will be identified.

Comparison of plankton communities and their environments in recent and past years, will contribute to identify Mediterranean regions in which marine biodiversity is most at risk due to climate change and anthropogenic activity.

Plankton collected during the expedition will be included in SAHFOS reference collection of worldwide plankton (Mediterranean Plankton Museum).

#### FUNDRAISING FOR THE PLANCTON PROJECT

We are collecting funds to carry out the project for whole duration of the expedition. We welcome voluntary donations of any value through bank transfer and we will give periodic notice of the funds collected on the site <a href="https://www.progettomediterranea.com">www.progettomediterranea.com</a>.

If you want to contribute to the conservation of Mediterranean biodiversity, these are the bank details:

#### **SPRAY SRL**

IBAN: IT20O050180240000000165303 BIC: CCRTIT2T84A

Cause: "liberal supply for plankton monitoring project"

#### About SAHFOS – Home of the continuous plankton recorder

SAHFOS (The Sir Alister Hardy Foundation for Ocean Science) operates the Continuous Plankton Recorder (CPR) survey, collecting data from the N. Atlantic and N. Sea on biogeography and ecology of plankton since 1931. As the Foundation has become more involved in international projects, work has been recently expanded to include other worldwide regions such as Pacific and Atlantic Oceans, Artic and Antarctic regions, Australian seas, South Africa and the eastern Mediterranean.

The results of the Survey are used by scientists across the world in environmental change studies and their impacts on marine life, advising stakeholders on various matters related to marine biodiversity and climate change.

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