

A.2.4. "Soundscape" and "Sailing for the blue life" experience exchange

Final Version of 02/09/2021 Event's Report























| Project Acronym | SOUNDSCAPE |
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| Project ID Number | 10043643 |
| Project Title | Soundscapes in the north Adriatic Sea and their impact |
| | on marine biological resources |
| Priority Axis | 3 |
| Specific Objective | 3.2 |
| Work Package | 2 |
| Number | |
| Work Package Title | Communication activities |
| Activity Number | 2.4 |
| Activity Title | Public events |
| Partner in Charge | |
| Partners Involved | IOF, CF |
| Authors | Alice Pari (CF) |
| Status | Final |
| Distribution | Public |



Minutes

Two sailing boats were travelling a route in the Mediterranean to support Ocean Decade 2021-2030 promoted by UNESCO; in the framework of the Project Citizen Science, two sailing boats were travelling a route in the Mediterranean. During summer 2021 (July-September), boats touched important milestones from an environmental point of view: Sea Turtles Recovery Centers, Marine Protected Areas, Natural Reserves. Conservation activities and research were organized at every stop. Crew, scientists and tourists were on board, working together on the different projects related to research and protection of the marine environment. Cetacea Foundation from Ricone, Italy, coordinated the project. For more information, see link: https://www.sailingforbluelife.org/.

The project leader is Fondazione Cetacea, an NGO with thirty years of experience in turtles and cetacean's conservation, environmental education and research. During the different stops Sailing for blue life, the crew organize activities with local project partners, and during the navigation, researchers are hosted on board to collect samples and data. The activities are coordinated by Laura Aludi, the resident biologist on board.

During the stop in Split, from August 27th to 29th, the crew of "Sailing for blue life" met the researchers of the Institute of Oceanography and Fisheries of Split for some activities related to marine pollution caused by human activities.

It was an organized workshop to exchange experience among EU projects "Soundscape" related underwater noise, "De fish Gear" and "Marless" related litter in the Adriatic Sea and their mitigation and the Project "Sailing for the blue life". Workshop organized in the premises of the Institute on July 28th, 2021, with the Agenda:

9:30 - 9:45 Registration

9:45 – 10:00 Opening speech (prof. Vlado dadić, Soundscape project coordinator)

10:00 – 10:30 Introduction to Institute of oceanography and fisheries (Dr Pero Tutman)

10:30 – 11:00 Presentation of Soundscape project (Prof. Vlado Dadić)

11:00 – 11:30 Marine litter and results obtained Interreg project "De fish gear."

11:30 – 12:00 Presentation project: "Sailing for the blue life" (capt. Francesco Delli Santi)

12:00 – 12:30 Visiting laboratories in Institute

12:30 - 13:00 Discussion and refreshment time

13:00 The end



On behalf of Prof. Živana Ninčević Gladan, director of the Institute of oceanography and fisheries, Dr Pero Tutman welcomed participants from two boats sailing around the Mediterranean in honour of 10 years Ocean (2021-2030) promoted by Union Nation. After that, he introduced participants to 91 years' history of the Institute, laboratories, research and educational activities of the Institute and scientific journal "Acta Adriatica" has been published since 1932.

The Institute of Oceanography and Fisheries was founded in 1930 as the first national scientific institution dedicated to marine research. The scientific activity of the Institute is multidisciplinary, encompassing biological, chemical and physical oceanography, sedimentology, fishery and mariculture.

Today, the basic orientation of the Institute's work is fundamental scientific research in the framework of various projects funded by the Croatian Science Foundation (HRZZ). A significant part of this research aims at detecting complex interactions that shape the Adriatic marine environment since understanding the ecosystem's functioning represents a necessary prerequisite to creating measures for the protection of the ecosystem and its biological resources, with a view to sustainable exploitation.

In addition, numerous projects funded by the European Commission or different commercial entities enable us to monitor populations and stocks of marine organisms, biotope mapping, initial assessments of the marine environment and various studies on environmental state and impacts. The physical, chemical and biological long-term data series collected by the Institute represent a valuable basis for implementing European directives aiming at aquatic environment management and protection (MSFD, WFD).

Prof Dadić introduced participants to the Soundscape project funded by CBC Interreg Italy-Croatia, main objectives and achieved results. The Adriatic Sea is a very vulnerable part of the Mediterranean, an ecologically and biologically significant area (EBSA, Convention on Biological Diversity) and hosting varied Natura 2000 sites and marine and protected coastal areas (MPAs).

The Northern Adriatic Sea (NAS) is highly impacted by increasing maritime traffic, tourism and resource exploitation whilst having very vulnerable biodiversity. Therefore, the project's main objective is to create a cross-border technical, scientific and institutional cooperation to face together the challenge of assessing the impact of underwater environmental noise on the marine fauna and, in general, on the NAS ecosystem. This cooperation aims to ensure the efficient protection of marine biodiversity and develop sustainable marine and coastal ecosystems and resources. Marine Strategy Framework Directive (MSFD) Descriptor 11(D11) points out the need to monitor and manage underwater noise to achieve Good Environmental Status (GES) of EU marine waters by 2020. Soundscape represents the most extensive project-related underwater noise at the Mediterranean Sea, starting on January, 1st 2019, ending in November 2021.



In short words, the Soundscape project changed the situation in the North Adriatic with "no data" about underwater soundscapes to 15 months of continuous data measure on the nine stations located in Croatian and Italian waters. Furthermore, they used them to calibrate Quonops numerical model to create monthly spatial maps in the north Adriatic and integrated them into Geoportal "Tools4MSP", which can help responsible persons make proper decisions related to underwater sound.

Dr Tutman presented general problems of marine litter in the Adriatic Sea, its classifications and possible measures for improving the situation in the marine environment to reach a position with Good environmental status (GES). After that, he spoke about the Interreg projects "De fish gear" and "Marless" performed in the Adriatic relate investigation of different types of litter in the water column, sea surface, sea bottom, and beaches including achieved results.

The captain of the expedition Francesco Delli Santi presented the objectives of the project "Sailing for blue life". It is a conservation project developed with tourists' active participation, which includes scientific research, citizen science, social and solidarity sailing. Covid-19 pandemic speeded changes in the touristic approach towards proximity tourism, more attentive to environmental issues and increasingly eager to participate in life-changing experiences. The main objective of "Sailing for Blue Life" is to combine these new needs with the possibilities offered by citizen science, thus identifying and promoting a new model in which tourists are no longer just responsible spectators but active actors in conserving biodiversity.

After all presentations and discussions, participants visited some laboratories in the Institute of oceanography and fisheries.









 $Fig. \ 1. \ Particiopants \ on \ meeting \ roome \ and \ in \ frant \ of \ the \ IOF \ bilding$





Fig. 2. The sailing boats in the passenger port of Split with Sondscape Project logo