

UN OCEANS CONFERENCE 2022

SIDE EVENT

28 June, 17.00-19.00

Library, Pavilhão do Conhecimento
(Pavillion of Knowledge), Lisbon

"Building a Bridge between Science and Sustainable Action in Managing Impacts of Non-Indigenous Species in the Mediterranean Sea"

THEMATIC FOCUS

Our proposed side event aligns with the theme of the Conference "Scaling up ocean action based on science and innovation for the implementation of goal 14: stocktaking, partnerships and solutions.

It is within the thematic focus of "Managing, Protecting, Conserving and restoring marine and coastal ecosystems".

Non-indigenous species in the Mediterranean basin result in ecosystem degradation. The threat needs urgent action to prevent irreversible damage to the ecosystem. The panel is organized with a gender balance of marine scientists, international experts on legal issues, educators, activists, civil society and academicians who will present on issues ranging from the impacts on marine biodiversity and the coastal ecosystem of non-indigenous species (NIS); methods of protecting, conserving and managing the basin; **understanding the effect of multiple stressors (e.g. warming, pollution, fisheries, invasive species) on the ecosystems and developing solutions to increasing the resilience of these ecosystems are the key towards effective management of marine ecosystems;** citizen science on identification, stocktaking and reporting of NIS; socio-economic impacts and innovative adaptations techniques such as introducing alien species in the diet and supply chain of Mediterranean countries.

POTENTIAL CONTRIBUTION TO THE CONFERENCE

The Mediterranean Sea is defined as one of the world's most diverse biodiversity hotspots. It is, however, struggling to maintain its rich biodiversity against various threats such as climate change, pollution, overfishing, and invasion of non-indigenous species (NIS). Due to the temperature increase in the sea water as well as to the opening of the Suez Canal, NIS are increasingly becoming a threat to the health of the Mediterranean Sea due their negative impact on the marine environment and biodiversity. If they can find a niche in the local ecosystem, they can settle and spread easily. In some cases, they aggressively prey on native fauna, such as seen in the case of lionfish. They can damage the balance of healthy ecosystem, which takes years to recover, as in the case of *Mnemiopsis leidyi* in the Black Sea (included in the Mediterranean Basin) as they preyed on eggs and larvae of pelagic fish.

We are committed to attaining the goals of SDG14 in the Mediterranean Basin. Non-indigenous species touches upon many goals within the SDGs. Key knowledge gaps need to be identified in order to develop sustainable policies, practices and responses on a basin-wide basis. Scientific research is of extreme importance to identify methods of monitoring and responding to the NIS invasion in the most optimal way and possibly to mitigate such negative impacts made by NIS. There are socio-economic costs associated with the impacts of non-indigenous species. Economic costs include damage and losses from invasion, management costs and costs related to its impact on sectors of the blue economy which is critical for most of the coastal communities around the Basin. Important economic sectors tend to rely on the marine environment as a major resource. Commercial fish stock and tourism are examples of sectors which are negatively affected. There are increased health costs such as from poisonous jellyfish stings or puffer fish. Monetizing the economic costs is a challenge; yet, there are a range of studies that attempt to calculate the costs of NIS invasion in the Mediterranean. Although not monetized in many of the countries in the region, studies show us that economic costs are billions of dollars (up to 25 billion dollars). The most effective way to attain these goals is for scientists, policy-makers, businesses and civil society to work together to find creative and sustainable solutions.

SPEAKERS:

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| TUDAV | Turkish Marine Research Foundation, NGO
Istanbul, Türkiye
Speaker: Prof. Dr. Bayram Öztürk
Topic: The Impacts of Non-Indigenous Species in the Mediterranean Sea |
| METU | Middle East Technical University, Institute of Marine Sciences
Erdemli, Türkiye
Speaker: Prof. Dr. Baris Salihoglu
Topic: Building a Bridge between Science and Sustainable Action in Marine Sciences |
| SPA/RAC | The Regional Activity Centre for Specially Protected Areas,
Mediterranean Action Plan, Tunisia
Speaker: Khalil ATTIA, SPA/RAC Director
Topic: Non-indigenous species and the Barcelona Convention |
| iSea | Non-Governmental Organisation for the Preservation of the Aquatic
Ecosystems, Greece
Topic: Introducing alien species in the diet and supply chains of Mediterranean countries |

IOI

International Ocean Institute (IOI)

International NGO, Malta

Speaker: Antonella Vassallo, Managing Director

TOPIC: “Spot the Alien!” An impactful citizen science and literacy campaign on alien marine species of the central Mediterranean