

EMSEA 2017 Conference Malta 7th-10th October 2017

University of Malta

Abstracts booklet

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Citizens and scientists work together to monitor marine alien species in Sicilian waters (central Mediterranean)

The spread of alien species is an ongoing phenomenon which is widely recognized as a major threat to biodiversity at different levels. The Mediterranean Sea is an important hotspot for marine alien species (ca. 1,000 such species recorded to date). The creation of early-warning systems is crucial for reducing the risk of invasive species introduction. Since intensive scientific monitoring programs could be very expensive, engaging citizens (e.g. tourists, fishermen, divers) through citizen science could be a useful tool for providing information and scientific data on the occurrence and spread of marine alien species. Citizen science is having an increasing success worldwide. The increase in the number of citizen science projects is possibly due to the wide availability of mobile technologies and internet access that enable an easy and cheap way to communicate and to interchange data.

The value of citizen science has been widely recognized. Despite this, in order to be used for scientific purposes and management decisions, the collected data need appropriate quality assurance measures such as validation and verification by taxonomic experts. We report on the experience of two citizen science projects: the Project "Caulerpa cylindracea – Egadi Islands" and the Project "Invasive Algae", included within the "Seawatchers" platform. The first one, sponsored by the STEBICEF Department of the University of Palermo and by the Egadi Islands Marine Protected Area (MPA), aims at creating a database on the spread dynamics of C. cylindracea within the Egadi Islands MPA. The second one, coordinated by the Institute of Marine Sciences of Barcelona (CSIC, Spain), collects data on 10 marine invasive alien species. The results of these projects highlighted the important role that citizen science campaigns can have as early-warning systems.

We also present a new citizen science project "Aliens in the Sea", launched in June 2017, aiming to collect data on marine alien species along the wider Sicilian coast and promoting information and public awareness campaigns.

