

Project Update: July 2022

Our project continues to monitor Marine Protected Area (MPA) Costa dos Corais' coral reefs on the coast of Alagoas and Pernambuco states, as well as shipwrecks that can serve as stepping stones to invasive species arrive in coral reefs. Along with the research actions, we also keep communicating in social media the invasion problematic, establishing citizen science partnerships including different engaged people and institutions to increase the effectiveness of the sun coral dispersal monitoring in Brazil. As a result of one of these citizen science partnerships, we received information from a diving operator about a possible new sun coral occurrence around the Alagoas coast (Itapagé shipwreck, Lagoa Azeda beach, Jequiá da Praia), which was possible to confirm by our team after our diving expedition, resulting in the first record of the sun coral occurrence in the Alagoas state (Fig. 1 and 2). The Itapagé shipwreck is located at the south and outside the limits of MPA Costa dos Corais, in the south coast of Alagoas state. The expedition to record the sun coral in the Itapagé shipwreck occurred in March 2022 and featured a partnership between our project and Federal University of Alagoas' Labs and federal environmental agencies (Fig. 3, see more: <https://www.instagram.com/p/Cbm5TbOLaRe/>). In this fieldwork to shipwreck, we also removed sun coral colonies to control their populations in the shipwreck (Fig. 4). After the field expedition to record new invaded site, we publicized it widely in several media vehicles (Fig. 5, see more: <https://globoplay.globo.com/v/10433866/>) and also reported formally to the federal environmental agencies. Recently, we also integrated in a working group about biological invasions in the Management Council of MPA Costa dos Corais to deal with policy actions regarding sun coral invasion in the region. Finally, another action in course of our project propose to develop a training course for scuba divers to identify, communicate and remove sun corals, which is being prepared in partnership with the diving operator Let's Dive (www.letsdive.com.br) to be incorporated as a specialisation PADI-Project Aware.



Figure 1 - Sun Corals on Itapagé natural shipwreck, first time reported in Alagoas state.



Figure 2 - High cover of the Sun Corals in shaded substrate of the Itapagé shipwreck.



Figure 3 - Field expedition to record new occurrence of the invasive Sun Corals in Alagoas, March 2022



Figure 4 - Sun Coral colonies removed from Itapagé shipwreck first site invaded in Alagoas coast



Figure 5 - Interview to TV regional channel about the first record of Sun Corals in Alagoas state