



What is BleachWatch?

BleachWatch is a community based coral reef monitoring program developed by the Great Barrier Reef Marine Park Authority (GRBMPA), Australia, during a mass bleaching event in 2002. BleachWatch is based on a volunteer network of people who regularly visit the reef and reports on its health. Over the years BleachWatch have become a key component of GRBMPA's coral bleaching response plan and is an excellent example of a successful partnership between the community and reef managers in detecting large scale coral bleaching. The monitoring reports are used to help reef managers to detect the onset of bleaching, as an early warning signal, and to assess the spatial extent and severity of potential bleaching events.

What is coral bleaching and why is it important to report coral bleaching?

Corals live in symbiosis with a single celled algae called zooxanthellae which lives inside the tissue of the coral. The coral provides shelter for the zooxanthellae and in return the zooxanthellae supply the coral with up to 90% of its food requirements. Coral bleaching is a natural response to environmental stress where the coral expel its zooxanthellae, the coral then turns white or transparent as it is the zooxanthellae which give the coral its color. If the conditions which caused the corals to bleach abate, the corals can survive however if the zooxanthellae are not regained the coral will starve and die.

A number of factors such as flood plumes, pollution, sedimentation, disease and increased water temperatures can cause corals to stress and bleach. Over the last years the major cause of coral bleaching is a consequence of climate change, unusually high water temperature. If the water temperature stays above average for a long period, severe and widespread bleaching can occur, also known as mass bleaching. The initial signs of mass bleaching are inconsistent and vary from gradual and patchy to rapid and uniform. Due to this inconsistency, a wide network of observers giving regular reports on the health of the reefs over a wide geographical scale becomes crucial to be able to detect the early signs of mass bleaching.

BleachWatch Egypt

BleachWatch Egypt has been adapted to the coral reef ecosystems of the Egyptian Red Sea coast. BleachWatch Egypt will assist managers to detect coral bleaching providing an early warning of bleaching. Since its start in Australia 2002 BleachWatch has been shown a useful tool to detect the onset of mass bleaching, but also a great tool to inform the community about coral bleaching and as it encourages tourism operations, organizations and individuals to participate in BleachWatch participants get a feeling of a closer connectedness to the

health of their home reefs. BleachWatch Egypt encourages managers to use BleachWatch as an interactive educating tool for their guests, strengthen the Tourism-Management relationship but also to be used as a great way to improve manager's, dive operators and dive guides knowledge about the reef they visit regularly. The first step of BleachWatch Egypt is to introduce and launch the BleachWatch monitoring program at five locations along the Egyptian Red Sea coast: Marsa Shagra, El Quseir, Lahami, St Johns and Wadi El Gimal.

BleachWatch Egypt was recently introduced at the Red Sea Diving Safari in Marsa Shagra, and a team of volunteers has also received BleachWatch training as part of the Climate Change workshops in Hurghada this August. Further workshops and an introduction to BleachWatch will be introduced in El Quesir, Lahami, St Johns and Wadi El Gimal later this year.