



Newsletter, June 25th, 2021



Proper Maintaining, Proper Retraining

Humanity's inability to effectively manage consumption and refuge efforts has proven to be a continual threat to coral reefs, which has shockingly left many of them degraded. Our contribution to global warming, along with other man-made results, brings us to the scientific community's prediction that coral reefs may not survive this century, per the study performed by the [United Nations](#).

Coral reefs suffer so greatly due to their proximity to our activities. The combination of a warming ocean and acidification effectively unite to gradually strip away the strength of our coral. The end result is a grand effect on an

entire ecosystem, rendering plummeting levels in reproduction and growth, recruitment and survival capabilities for the coral and reef dwellers¹.

Despite the grinding halt of many world-wide activities due the coronavirus pandemic response, the [NOAA](#) surprisingly reports carbon dioxide levels are at the highest point in 3.5 million years. As the carbon dioxide concentration in our oceans rise, so does the ocean temperature.

Simply put, the warmer waters prohibit the coral system from proper photosynthesis execution, therefore limiting the coral's ability to make proteins, fats, and carbohydrates, and produce calcium carbonate. In the expert analysis of the [NOAA](#), these are essential functions within the coral's ecosystem, and "the driving force behind the growth and productivity of the coral reef."



In this environment, where the coral experiences warmer oceans, the stress response that occurs (where the coral becomes less efficient) is called [coral bleaching](#). The bleaching does not indicate the death of the coral, it does however place the coral under additional stress, making it more probable to mortality. This insight does shine a light of hope, though this type of bleaching may become an annual occurrence by 2050, as international models have [indicated](#).

Globally, over six million fishers depend on our coral reefs to maintain their livelihoods hence, a balance must be sought and sustained for the survival of these fishers and our global inhabitants². The development and implementation of target objectives at regional, national, and international levels (to include a united front in conservation design) is paramount to the protection of the coral reefs along with their internal and external global habitats. This is our "end-goal" at OceanSaviours. We ask that you join us in the world-wide effort to maintain our marine ecosystem, as we retrain humanity on the proper management this, most precious of resources.

1. Ateweberhan, M. , Feary, D. A. , Keshavmurthy, S. , Chen, A. , Schleyer, M. H. , & Sheppard, C. R. C. (2013). Climate change impacts on coral reefs: Synergies with local effects, possibilities for acclimation, and management implications. *Marine Pollution Bulletin*, 74, 526–539. <https://doi.org/10.1016/j.marpolbul.2013.06.011> [[PubMed](#)] [[Google Scholar](#)]

2 Anthony, K. R. N. , Maynard, J. A. , Diaz-Pulido, G. , Mumby, P. J. , Marshall, P. A. , Cao, L. , & Hoegh-Guldberg, O. (2011). Ocean acidification and warming will lower coral reef resilience. *Global Change Biology*, 17, 1798–1808. <https://doi.org/10.1111/j.1365-2486.2010.02364.x> [[Google Scholar](#)]