Abstract

Impact of Climate Change on Sharks †

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Abstract: The global ocean has been shielding our planet from abrupt climate change by absorbing a large portion of the anthropogenically emitted carbon dioxide and the excess heat trapped in the atmosphere, leading to ocean acidification and warming. Additionally, oxygen loss in the ocean (also known as deoxygenation) is being exacerbated by rising global temperatures. This complex 3-way interaction (“deadly trio”) will definitely shape populations’ fitness and ecosystems’ health in the ocean of tomorrow. Here, I discussed the differential impacts of the “deadly trio” on the marine biota, with a special emphasis on sharks.

Keywords: sharks; climate change; warming; acidification; hypoxia; deoxygenation

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