

The Geographic Implications of Rising Temperatures on Great White Shark Home Ranges.

Wednesday, October 25, 2023 5:00 PM (20 minutes)

Climate change is causing many significant shifts throughout the world's ecosystems, including those in oceans. Oceans act as a buffer to climate change but are reaching their tipping point for absorbing an immense amounts of heat and carbon dioxide. Rising ocean temperatures are causing many organisms to relocate to more suitable locations beyond their traditional zones. Great White Sharks, *Carcharodon carcharias* are one such species whose locations are actively shifting. Historically they have been found along the coasts of every continent except Antarctica, existing mostly along continental shelves and open waters of temperate and subtropical waters with a temperature range 50-80°F. The expansion of their range poleward, seems to be the result of following their food sources. This migration is seen also in the shifting locations of Shark nurseries. This presentation discusses the locational shifts of the Great White Sharks along the California coast line. Tracking and understanding these changes is important for the protection of the species, understanding the locational expectations of predator prey expectations, as well as the safety, perceptions and education of the public who recreate in coastal waters.

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Session Classification: Student Competition