

Tracking project reveals roaming tiger sharks

July 31 2015, by Denise Cahill



Credit: Lwp Kommunikáció

THE sight of a shark's dorsal fin sticking out of the water usually strikes fear into the hearts of swimmers but for a group of WA researchers every time a tagged tiger shark's (*Galeocerdo cuvier*) dorsal fin stuck out of the water represented another opportunity to gather more information.

A recent study by local researchers tagged and tracked 11 tiger sharks

off Ningaloo Reef in WA's north west for between seven and 517 days and determined the apex predator travels thousands of kilometres more than expected.

UWA's Luciana Ferreira says there were large knowledge gaps about basic features of the tiger shark's ecology.

The sharks are considered an important structuring force within the topical marine ecosystem and essential to the health of oceans.

The study spanned from 2007-2010 and once the sharks were caught, satellite tags were fixed to their dorsal fin to make sure its antenna was out of the water every time the fin breached the surface, necessary for the information to be transmitted to researchers.

One tagged shark recorded one of the largest geographical ranges of movement ever reported for the species, travelling more than 4000km during 517 days of monitoring.

Apex predators unfazed by fluctuating temperatures

Other sharks kept to coastal waters in the vicinity of where they had been tagged and most spent their time in water temperatures between 23 and 26 degrees Celcius but they also travelled through waters with temperatures ranging from between six and 33⁰C.

Ms Ferreira says this research showed tiger sharks, which can grow up to five metres, could migrate over very large distances and different water temperatures.

"Tiger sharks are considered mostly residents of tropical waters, however, we showed that these sharks can travel thousands of kilometres and go as far south as to the cold temperate waters off Albany," she says.

Ms Ferreira says the large scale and seasonality of [tiger shark](#) movements of WA indicated they were connecting different habitats along the coast.

"Our results also showed that the regional marine reserves can only provide temporary protection to tiger sharks and their ability to move extensive distances will likely take them across national boundaries," she says.

"This means that any fishing pressure in parts of their distribution range may cause negative effects to the whole population which will result in severe impacts to pristine environments such as the Ningaloo Reef by the removal of these [apex predators](#).

Provided by Science Network WA

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