

Shark study shows value of citizen science

Recreational dive guides can help researchers to keep track of changes in shark populations, according to a **new study** published in *PLoS ONE* by University of Western Australia (UWA) and Australian Institute of Marine Science (AIMS) researchers.



Credit: © Save Our Seas Foundation / Peter Verhoog

The study compared counts of sharks reported by professional dive guides with automated counts generated by sharks tagged with acoustic tags at popular dive sites in Palau, Micronesia.

The data from the dive guides, who monitored sharks over 5 years in more than 1000 dives, closely mirrored results from the tags, showing that the guides were accurate and reliable observers – and in some cases even better than the high-tech tags.

Clear preferences by reef sharks for particular water temperature and current regimes on the reef emerged from the data – information that wasn't revealed by the tags.

The study supports the use of citizen science in the collection of data for shark research.

Lead author Gabriel Vianna said that while earlier studies had used citizen science to investigate trends in shark populations, this is the first independent, long-term assessment of the quality of this type of data.

‘Citizen science projects are becoming increasingly popular for the scientific community and general public. However, there is still some controversy about the reliability of the results they produce,’ said Vianna.

‘Our study shows that with a little bit of training, experienced recreational divers can collect very useful data that can be used to monitor shark populations over broad areas and long periods of time at minimal cost.’

Study co-author, Mark Meekan of the Australian Institute of Marine Science, said: ‘These findings are important

because they show partnerships between scientists and the diving industry may allow the establishment of low-cost research projects that can assist the conservation of sharks at popular diving destinations’.

‘This is particularly important for many developing countries and island nations that rely on marine tourism.

‘Reef sharks are being heavily overfished, and at the same time the lack of financial resources for monitoring shark populations hampers efforts for conservation.’

Source: AIMS

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