





MEDIA STATEMENT

Thursday, 23 March 2016

WHERE HAVE THE LARGEST WHALE SHARKS GONE?

Researchers from The University of Western Australia and the Australian Institute of Marine Science (AIMS) have raised concerns about the whereabouts of the world's biggest whale sharks after finding that the largest sharks observed in recent years were smaller than those recorded more than a decade ago.

Lead author of a new study and IOMRC postdoctoral fellow from UWA's Oceans Institute, Dr Ana Sequeira, said it was important to know the size of whale sharks because it provided information about their population status.

She said getting accurate estimates of the size of the fish is difficult as it needs to be done while they are freely swimming.

"A common technique is to compare the sharks with an object of known size while swimming alongside them however these estimates are often inaccurate," said Dr Sequeira.

"We found the margin for error increased as the actual size of the target increased which meant that big sharks of around 10 to 11 metres were mistakenly thought to be up to about three metres smaller.

"In our study, UWA and AIMS researchers compared visual estimates of whale shark sizes with those obtained using an underwater stereo-video system."

Dr Sequeira said the research showed the largest sharks observed at Ningaloo Reef in recent years were smaller than those recorded at the same location more than a decade ago.

"The majority of whale sharks seen at Ningaloo were juveniles with mean lengths of around six metres, which given the fact that the fish reach maturity when they are about nine metres long, prompts the question, where are the adults?"

Study co-author Dr Mark Meekan from AIMS said that with the exception of groups of large females reported at two locations in the eastern Pacific Ocean, there was a lack of adult whale shark sightings around the world.

"Co-occurrence of adult males and females ensures the survival of a species so not knowing the whereabouts of adult whale sharks and how many still exist presents a challenge for understanding their conservation status." Dr Meekan said.

He said one possible way to improve understanding of the whereabouts of the biggest sharks was by using satellite tagging to track the few large ones known to still occur at Ningaloo Reef but that more research is needed to help locate large whale sharks and to clarify numbers of mature animals still in existence.

"Understanding the whereabouts of the biggest whale sharks will also help us understand how human activity such as industrial developments, fisheries and boat strike, might impact the animals," Dr Meekan said.

The research, published in the journal *Royal Society Open Science*, was supported through the Indian Ocean Marine Research Centre (IOMRC) collaboration.

MEDIA REFERENCES:

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