

**MEDIA STATEMENT**

**Wednesday 16 November 2016**

**TEENAGE MALE WHALE SHARKS DON'T WANT TO LEAVE HOME**

Researchers from The University of Western Australia and Australian Institute of Marine Science, (AIMS) and collaborators across the Indian Ocean have completed a huge photo-identification study to assess the seasonal habits of whale sharks in the tropics. They were surprised to discover that the male juveniles didn't seem to venture too far from home.

The researchers used photo-identification data, collected by citizen scientists, including crews working on the tour boats, and researchers, to assess the connectedness of five whale shark aggregation (gathering) sites across the entire Indian Ocean over a decade.

Comparing the unique markings of more than 1000 individual whale sharks, the team appraised whether the seasonal gatherings of these animals could be linked by migration.

After sifting through over 6000 photos, they found that, on average, 35 per cent of individuals were re-sighted at the same site in more than one year but that no sharks were found to have moved across the Indian Ocean. One shark was tracked between regional localities from the Seychelles to Mozambique, suggesting that links do occur but that populations on either side of the Indian Ocean are likely to be distinct.

PhD researcher and lead author, Samantha Andrzejczek from UWA's Oceans Institute and AIMS, said the researchers had initially thought the juveniles crossed oceans to visit other important sites during their migration, however it appeared their movements were strictly regional.

"This is good news for our whale sharks, Ms Andrzejczek said. "Whale sharks are under threat from human impacts of hunting and ship strike and it makes it much easier to plan for conservation if we only have to deal with neighbouring countries in each region rather than localities spread across the entire Indian Ocean."

Not only were the whale sharks staying in the region, many of them returned multiple times to Ningaloo, in Western Australia's North West.

"Our whale sharks at Ningaloo are mostly male teenagers. They don't become reproductive adults until they grow to sizes of more than eight metres in length and this is thought to take up to 30 years," Ms Andrzejczek said.

"Our young males don't seem in any hurry to move on from their feeding grounds at Ningaloo – we have some individuals that have now been sighted here for 19 years and have even matured."

Study co-author, Dr Mark Meekan of AIMS, said the study also highlighted the unknown facts about these sharks.

"Although they are the largest fish in the sea, they are still very hard to find – it's a very big ocean out there.

"We know the teenage males are homebodies, but that does not necessarily apply to the rest of the population," he said.

Adult females and males are rarely sighted at Ningaloo and at all other locations in the Indian Ocean.

“Finding these animals is going to take some effort, as our computer –simulation analysis of the data showed that we need more photos from more localities just to get a better estimate of migration patterns at even regional scales,” Dr Meekan said.

Dr Andrzejczek said the photo-identification approach was a great opportunity for the public to get involved in whale shark conservation.

“Many of the photos used in the study were sourced from tourists who snorkelled with the sharks as part of the tourist industry, as well as the industry videographers and tour guides, she said.

“We even downloaded videos from YouTube to get identification shots. “Social media provides a great source of science for charismatic animals like whale sharks and we hope to encourage more engagement across the Indian Ocean.”

The study, part-funded by Quadrant Energy Ltd and the Department of Parks and Wildlife WA, was published today in *Royal Society Open Science*.

#### **MEDIA REFERENCE**

David Stacey (UWA Media and Public Relations Manager)  
Samantha Andrzejczek (UWA Oceans Institute/AIMS)  
Dr Mark Meekan (AIMS)

(+61 8) 6488 3229 / (+61 4) 32 637 716  
(+61 4) 8129 8625  
(+61) (0) 429101812