Olive Ridley turtle found tangled in drifting FAD in Alphonse lagoon - 14.01.2013

On December 17, 2012, we (Aurélie Duhec and Richard Jeanne, conservation officers for Alphonse group, Island Conservation Society of Seychelles) noticed a Fish Aggregating Device (FAD) drifting south in the Alphonse Lagoon.



FADs, called "rado" in Kreol, are artificial floating objects, created by purse seine fishers, to attract tuna. They usually comprise a bamboo raft 4-6 m2 covered on top with purse seine netting that hangs down beneath the raft, and are fitted with a transmitter that informs the fisher of the location of the FAD as well as how many fish have been attracted to it.



FADs commonly wash into shallow waters in the outer islands. Whenever we come across a FAD, we check for any trapped animals and cut away the underwater netting that can also damage corals.

At 3pm while approaching the device at Alphonse, we saw a dead turtle entangled. We were sad, but also surprised, because this turtle was neither a Hawksbill nor a Green turtle! The carapace shape was wider and the color of the victim was darker than what we are used to. Richard jumped into the sea to disentangle the animal which he recognised as an Olive Ridley (Lepidochelys olivacea). We later confirmed that this was only the third record of an olive ridley for all of Seychelles, and the first in the outer Islands.

The turtle was a juvenile. Adult Olive Ridleys typically weigh 35-45 kg with a carapace length of 62-70 cm; while our turtle weighed under 15 kg with a carapace less than 50 cm long. Its front flippers had been badly injured by the net, but it seemed to have died very recently. Decomposition had not yet begun, and even the eyes (usually the first organs eaten by scavengers) were intact. But we were saddened to think that the turtle may have suffered for days or weeks while drifting trapped in the nets of the FAD.

The Olive Ridley occurs in all major oceans, and is best known for its extraordinary habit of nesting in large groups named 'arribadas," after the Spanish word for "arrival" that describes these massive synchronised nesting events. These turtles often occur in large flotillas travelling along the continental shelves between breeding and feeding grounds in the eastern Pacific and the northern Indian Ocean, but are thought to be less common in the western Indian Ocean. Before December 2012, Seychelles had only two records of Olive Ridley turtles — both immature and both associated with fishing gear near Mahé.



The first one, found dead in September 2006 in Victoria harbour, was believed to be a by-catch discarded by purse seiners. The second, found alive in May 2007, had been washed ashore tangled in marine debris that amputated its front flipper. Tragically all three turtles had been unintentionally injured or killed by fishing operations or human waste. There is increasing concern about the damage caused by the netting associated with the drifting FADs, thousands of which have been released by purse seiners operating in the Indian Ocean in recent years. Even fisheries biologists have highlighted the need to modify the FAD design to reduce its impact on non-target marine life. Our olive ridley specimen has been donated to the Natural History Museum of Seychelles which plans to use it in a special exhibit telling the story of how it died in the FAD.