

Whale shark aggregations and biodiversity in the Arabian Gulf - an example of research collaboration between authorities, research institutions and the oil industry in Qatar

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Al Shaheen is located in the central part of the Arabian Gulf and represents the largest offshore oil field in Qatar. Maersk Oil is operating the field on behalf of its partner Qatar Petroleum. This area is also a highly productive marine environment due to a combination of high nutrient loading, strong currents and high temperatures. Observations first reported by offshore platform workers suggest that Al Shaheen hosts one of the world largest aggregations of whale sharks (*Rhincodon typus*). The whale shark is listed as vulnerable on the IUCN Red List of Threatened Species and is the largest fish in the world.

The Qatar's National Vision (QNV) for 2030 aims to direct Qatar towards a balance between developmental needs and the protection of its natural environment. In order to contribute to QNV, Maersk Oil has established a research and technology centre (MO-RTC) in the Qatar Science and Technology Park with a budget of more than US\$ 100 million over a 10-year period. Enhancing oil recovery and minimising impact on the marine environment are key research themes at MO-RTC. Therefore, MO-RTC has signed a memorandum of understanding with the Ministry of Environment Qatar (MoEQ) with the objective to study the diversity of marine species in Qatar and has become an active partner in the Whale Shark Research Project ("QWSR") that was launched by MoEQ and David Robinson from Heriot-Watt University. The overall objective of QWSR is to provide a long term monitoring programme, which can provide a robust description of the whale shark population and marine ecology in Qatari waters. The activities conducted in 2012 included a two-week whale shark expedition with participation of international scientist. The results confirm that the whale sharks feed on the high concentration of zooplankton in the water. Satellite and acoustic transmitters were attached to the sharks to follow their movements. A better understanding of the hydrodynamics and food chains in the Arabian Gulf will add to the understanding of the population dynamics. The data will make it possible to take appropriate action in order to secure the protection of biodiversity in the Arabian Gulf.