Country Updates

This document contains a compilation of all written summaries of the country presentations to be given under agenda item 4 that were received by Friday, 26 November, UTC 12:30.

- Bahrain
- Islamic Republic of Iran
- Kuwait
- Saudi Arabia
- United Arab Emirates

KINGDOM OF BAHRAIN
Supreme Council for Environment
مملكة البحرين
المجلس الأعلى للبيئة

2021 Country update (The Kingdom of Bahrain) summary (2-3 paragraphs):

In 2007, the Marine Life Mortality Program[1] was initiated to monitor, quantify, and assess the main threats that marine turtles face in the region. Evidence throughout the years has indicated that the use of shrimp bottom trawls, locally known as "Al-Karaf", was responsible for most of the Green and Loggerhead turtle mortalities. The regular monitoring of Bahrain's coasts for dead marine turtles has also resulted in the sighting of the first Olive Ridley turtle in Bahrain in a study by (Abdulqader and Miller, 2012). Another ongoing project is the Marine Turtle Rehabilitation Program, where injured turtles either found during the Marine Life Mortality Control Program field surveys or by sightings informed by the citizens, are sent to Al-Areen Wildlife Reserve to receive appropriate care and treatment. Once the turtles have regained their health and strength, they are then reintroduced back into the waters. Two Green turtles have been rehabilitated and introduced back to their environment this year.

The infrastructure developments in the country are not located in marine protected areas, which is where the turtles are mainly found as they forage and feed on the seagrass beds, and so such projects have not had any observable impact on turtle populations. These marine protected areas as specified by (*Decree-Law No. (16) issued in 1996 and designated Hawar Islands and the Surrounding Territorial Waters as a RAMSAR site in 1997) and (Decision No. (3) of 2017 of the Supreme Council for the Environment concerning the designation of Hayr Bulthama, Hayr Shttayyah and Hayr Bu A'mamah and the Surrounding Buffer Zone as a Marine Protected Area)* have contributed to the safeguarding of the habitats the turtles depend on; as well as the *(Ministerial Order (3) of 2003 with respect to the Prohibition of Hunting all Species of Sea-Cows, Marine Turtles and Dolphins*). Moreover, the issue of the use of Al-Karaf and shrimp fishing was and is being tackled by designating shrimp fishing ban periods (6 months of the year) and (*Decision No. (205) of 2018 on the Prohibition of Bottom Trawling (Al-Karaf)).*

[1] Previously the "*Dead Marine Turtle Monitoring Program"* by Bahrain Center for Studies and Research (BCSR), was dissolved in 2010. The "*Marine Life Mortality Program"* (following the same premise as the previous program and is the current and ongoing program) was then initiated in 2014 by the Supreme Council for Environment (SCE).

A globally noted threat to turtles is plastic litter. Although not a leading cause here, there have been cases of turtles found surrounded by plastic in Bahrain. There is a worry that this threat may develop due to the increase in the use of single-use plastic or disposables because of the pandemic (masks, gloves, plastic cutlery…etc). However, this use is understandable and necessary for the health and safety of the people, which is why citizens and residents should be made aware of the simple steps they can take to avoid harming marine life and turtles by properly disposing the necessary plastic like masks, and overall reducing, reusing, and recycling other plastic waste. The threat brought about during the shrimp fishing seasons and the use of Al-Karaf has seen a notable improvement and can be considered a success story where a 90% decrease in marine turtle mortality has been observed compared to the years before two decisions of the Al-Karaf ban and setting 6-month shrimp fishing bans (IOSEA Marine Turtles MoU – Bahrain National Report, 2019).

References

Abdulqader, E. and Miller, J., 2012. Marine Turtle Mortalities in Bahrain Territorial Waters. *Chelonian Conservation and Biology*, 11(1), pp.133-138.

IOSEA Marine Turtles MoU – Bahrain National Report, 2019. *IOSEA MARINE TURTLES MEMORANDUM OF UNDERSTANDING - NATIONAL REPORTING 2019*.

Marine turtle conservation and research activities in Iran

By: Asghar Mobaraki

Research and conservation: Considering the reproductive populations of Hawksbill and Green turtles in the country through protection of the nesting sites, establishment of small scale hatcheries and nest protection, protection of the nesting sites, patrolling and public awareness is still underway as regular defined activities in nesting season. Some area are under the protection and control of Iran Department of Environment and in some parts, Free Zone Area Authorities have their own initiatives, namely Kish and Queshm Islands.

Research on foraging populations, mainly consisted of Green turtles has been started in the past years and tagging of them in the main foraging areas also is part of the work. Following the genetic works on Hawksbill, the genetic study on foraging green turtles also have been conducted and the results were quite outstanding by declaring high genetic diversity and recording on new haplotypes.

Survey and study on the fisheries by catch mortality in turtles have been part of the works in the past years and some main fishing sites have been under visit to find out any mortality. This work, along with foraging turtle studies, leaded to have more records on Olive Ridley turtles in the Oman sea area.

Different aspects of nesting biology and nesting habitats are party of university students works as their master and phD thesis too.

Like the other parts of marine turtle's habitats in the region, development on some sites are underway, like in the Free zone areas, like the establishment of tourism/industrial or economical centers. These activities increase the traffic of the boats, fishing activities, different kind of pollution, destruction of nesting sites, and other negative pressures. Habitat destruction in coastal area, in some places, is unfortunately serious, affecting the nesting and foraging grounds.

In providing more legal protection on all sea turtle species, for strengthening the supports and protection, the fine of illegal harvest and kill of turtles has been increases in the past year. Moreover, local fishermen awareness and education and catch control is regularly done in some places.

Some main habitats of turtles, specially the nesting sites of Hawksbill, have been upgraded as National Park, with more restrictions for harmful and destructive activities.

Climate change effects are a big concern in the area, mainly The Persian Gulf, and some modeling at the national levels are underway, but the facets on the new generations of Hawksbills in not clear and evident, needing for more detailed field work.

Although the different aspects of pandemic have not been studies, but lockdown and decreasing of trips and tourism activities, gave turtle habitats to be safe and secure at least for a 1-2 year long. But plastic pollution seemed to be increased as a result of increased on usages.

Research related to marine turtles and/or their habitats

-A couple of studies

→ Most recent being of Hawksbill tracking

Conservation project related to marine turtles and/or their habitats

-Checking for turtle nests, turtle eggs &/or nesting turtles

-Eggs were found damaged in October (around 1 m of sand was eroded from the beach due to change in seasonal wave activity).

-Suggesting to protect the area where most nests were found (June-October)

-Signage for people to stay away from the area during nesting season

Large infrastructure developments affecting marine turtles' habitats (underway)

-Khairan City (phase 3 & 4) south Kuwait where turtles are mostly found

-A new building for the General Department of Coast Guard in Qaruh Island (a very small island; the smallest in Kuwait, where nests were found throughout June-October).

-Al-Zour North phase 2 & 3 independent water and power project south Kuwait where most turtles are found.

Laws affecting marine turtles and/or their habitats

-The Environment Protection Law No. 42 of 2014

-PAAF Resolution No 521/2008 regarding prevent hunting of turtles, sea mammals, sharks and some rare fishes.

-EPA's suggestion to PAAF for Resolution No. 1620/2017 that bans trawling.

-Eco-friendly trawling nets as part of efforts to introduce eco-friendly fishing gears to the Kuwaiti markets

→ TED

Emerging threats or challenges

-Marine litter

-Ghost nets

-Rainfall outlets

-Urban activities along the coastline

Achievement/Success story

-Cleanups with cleanup volunteer groups

-Turtle rescues

المركز الوطني
لتنمية الحياة الفطرية
National Center for Wildlife
المملكة العربية السعودية

Sea turtle nesting site conservation initiatives in Saudi Arabia

(A pilot study at Ras Baridi, Al-Hassi and Ras Al-Shabaan)

Conservation of marine habitats and the important flora and fauna within are highly important and a priority for the National Center for Wildlife in Saudi Arabia. Among the most important components of marine biodivery are sea turtles and their feeding and nesting habitats. Sea turtle nesting sites have received great attention in the wildlife sector in Saudi Arabia, having been documented in various surveys since the 1980s. The marine department at the Saudi National Centre for Wildlife has established a specialised programme to deal with sea turtle conservation and research. This new NCW sea turtle initiative focuses on:

- Determination of important sea turtle habitats in the Kingdom of Saudi Arabia.
- Development of site-specific Turtle Monitoring Plans
- Understanding threats to sea turtles and design of effective mitigation measures to tackle or reduce impacts.
- Removing debris from sea turtles nesting sites.
- Fencing three main sites as a pilot study; and recruit and trained rangers to monitor the sites and enumerate turtle nesting events at these sites.
- Updating laws and regulations regarding sea turtles in the Kingdom.
- Development of a National Plan of Action for Sea Turtles

Our presentation will provide a summary of what has been accomplished under this initiative and what future work will include.

UNITED ARAB EMIRATES
MINISTRY OF CLIMATE CHANGE
& ENVIRONMENT

Update on the marine turtle conservation in the UAE

New research or conservation projects related to marine turtles and/or their habitats

The UAE has several recent conservation projects for marine turtles carried around the country, some of which are the following:

- Nationwide general conservation efforts:
    - Monitoring programs for turtles including turtle satellite tracking and collection of data (body measurements blood sampling, genetic sampling and flipper tagging)
    - Nesting beach temperature modelling
    - Nest temperature modelling
    - Relocation of nests that are expected to flood to shaded areas
    - Deep water habitat survey to identify possible habitat areas across the Emirate.
- Sharjah Standings Response Program (SSRP):

Through the examination of stranded marine reptiles, marine mammals and sea birds, this program, led by the Environment and Protected Areas Authority (EPAA), aims to expand the existing knowledge on the biodiversity, ecology and threats of marine fauna in the Emirate of Sharjah, United Arab Emirates. This knowledge would support the development of evidence-based conservation action and policy in the region as well as educate the wider public on the importance of conserving species and other emerging issues. Additionally, this program acts as an important tool for the response and rescue of live strandings. In addition to ongoing work, this program has resulted with great deal of published research about marine turtles, with many of these studies being the first of their kind in the UAE and wider Arabian region:

- Gulf Green Turtle Project:

The Gulf Green Turtle Project was a four-year project completed that completed in 2019 and was led by Emirates Nature-WWF in collaboration with the UAE's Ministry of Climate Change and Environment, the Environment Agency – Abu Dhabi, the Environment Protection and Development Authority of Ras Al Khaimah, and the Marine Research Foundation. The project successfully combined laparoscopy and satellite tracking to explore the regional habitat connectivity in the region and provided insights into breeding migration routes, foraging behaviour, and the effectiveness of Marine Protected Areas for green turtles

(*Chelonia mydas*). As part of the project, the first successful round-trip tracking of female green turtles from feeding areas to nesting grounds and back was also recorded. The project further contributed to the development of conservation strategies and policies at a local and regional level, as well as supported population assessments, management practices, and threat reduction. The Gulf Green Turtle Project complements Emirates Nature-WWF's previous similar project (2010-2013) on hawksbill turtles (*Eretmochelys imbricata*).

- Field surveys in Umm Al Quwain:

Emirates Nature-WWF undertook field surveys between March 2020 and June 2020 across Umm Al Quwain's shallow coastal lagoons, deploying both Baited Remote Underwater Video Surveys (BRUVS) underwater and Unmanned Aerial Vehicles (UAVs or drones) overhead – utilizing two methods that complement each other to characterize the megafauna in the area. Results of the field surveys show a high abundance of both green turtles and hawksbill turtles, and thus the data confirms these coastal lagoons are an important foraging area for marine turtles in the UAE.

- Nature-Based Solutions for People, Biodiversity, and Climate in the UAE:

As part of the recently launched "Nature-Based Solutions for People, Biodiversity and Climate in the UAE" project financed by HSBC Philanthropic Funds, Emirates Nature-WWF partnered with Ministry of Climate Change and Environment as well as the Environment Agency – Abu Dhabi and the International Center for Biosaline Agriculture. A component of the project will focus on biodiversity surveys within two coastal lagoon seascapes in the UAE, studying the use of these ecosystems by marine vertebrates, including turtles.

Large infrastructure developments affecting marine turtles and/or their habitats (proposed or underway)

Several development projects around protected areas are expected to impose a threat to the marine turtle habitats. The concerned authorities in different emirates have worked to develop contingency plan to adverse theses expected impacts. Furthermore, in the eastern coast of the UAE there is a concern surrounding the development and urbanization as well as persistent oil spills in coastal areas

UNITED ARAB EMIRATES
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Changes in policy, laws, or management frameworks affecting marine turtles and/or their habitats

The UAE developed and adopted the national plan of action for the conservation of marine turtles in 2019. The vision of the plan is "Marine Turtles populations and their critical habitats in the UAE are effectively conserved and managed to enable their sustainability".

The action plan adopted six goals which include:

1. Reduce direct and indirect causes of marine turtle's mortality
2. Protect, conserve and rehabilitate marine turtle's habitats
3. Improve understanding of marine turtle's ecology and populations through research, monitoring information exchange
4. Raise public awareness and encourage public participation in marine turtle's conservation activities
5. Enhance the implementation of national legislations and policies for the protection, cooperation and integrated management of marine turtles at the national, regional and international levels
6. Enable effective conservation through capacity building and awareness

Furthermore, some of the recent changes in management frameworks in the country include:

- The ban of surface netting in Abu Dhabi which has affected turtles positively
- Portion of the Jabal Ali Marine Sanctuary, in Dubai, was declared as a Ramsar Site in 2018

Emerging threats or challenges (incl. caused/aggravated by the pandemic)

- Nesting sites are threatened by dynamics and changes in land use due to the construction and operation of development projects
- Feeding habitats are impacted by the dynamics in the construction and operations of development projects
- Climate change: we have been seeing exceptionally high temperatures during nesting season
- As discussed above there is a great deal of work done and ongoing on sea turtle threats through the Sharjah Strandings Response Program (SSRP). As we continue to explore marine debris ingestion we found that green, hawksbill, loggerhead and olive ridley sea turtle all ingest marine debris with juvenile green sea turtles ingesting the highest quantities and frequencies and loggerheads ingesting

the highest masses. Turtles were also observed to be threatened by boat strikes and entanglement in marine debris including ghost gear. Abandoned rusty gargours were observed to be especially dangerous when ingested though they were also observed to entrap and drown sea turtles. Evidence was observed that oil spills do correspond with sea turtle die-offs.

Achievement/Success story

- Launch of the national plan of action for the conservation of marine turtles in 2019.
- Turtle release events are consistently being conducted in the country, over 200 turtles have been released in the past year.
- In the past 3 years, several awareness-raising activities on turtle conservation were conducted targeting the general public and students, including dissemination of information on social media platforms and focused activations and campaigns.
- Turtle nesting in the Jabal Ali Marine Sanctuary has been increasing in the past three years amidst anthropogenic pressures in the area. Turtle egg translocation activity has also been consistent in assuring hatchling success whenever a nest was observed to be prone to animal poaching or tidal reach.
- Different turtle rehabilitation and release programs in the country including Abu Dhabi, Dubai, Sharjah and Fujairah.
- Observation of the first olive ridley sea turtle nest in the UAE: