

# FROM HARM TO HOPE: PROMOTING AWARENESS TO COMBAT MUTILATIONS OF SEA TURTLES IN THE EGYPTIAN RED SEA



MICOL MONTAGNA<sup>1,2</sup>, AHMED GHALLAB<sup>3</sup>, AGNESE MANCINI<sup>1,4</sup>, ABDALLAH TAHER<sup>1,2</sup>, VALERIA ROMA<sup>1</sup>, MARILUZ PARGA<sup>5</sup>, DANIELA FREGGI<sup>6</sup>, ANTONIO DI BELLO<sup>7</sup>

<sup>1</sup> TURTLEWATCH EGYPT 2.0; <sup>2</sup> MARINE LIFE CONSERVATION AND PRESERVATION FOUNDATION; <sup>3</sup> RED SEA PROTECTORATES, NATURE CONSERVATION SECTOR, MINISTRY OF ENVIRONMENT; <sup>4</sup> GRUPO TORTUGUERO DE LAS CALIFORNIAS; <sup>5</sup> SUBMON; <sup>6</sup> LAMPEDUSA SEA TURTLE RESCUE; <sup>7</sup> VET MED DEPT, UNIVERSITY OF BARI



## INTRODUCTION

Turtle Watch Egypt 2.0 (TWE), a citizen science project, monitors marine turtles along the Egyptian Red Sea coastline, from South Sinai to Shalateen since 2011. Between 2018 and 2024, TWE and the National Park (NP) recorded 10 sightings involving 13 turtles. Of these, 12 were found dead with severe injuries, including the removal of the keratin layer from the carapace and, in some cases, damage to the head and flippers. In 2024, TWE and NP documented the first known case of a critically endangered hawksbill turtle (*Eretmochelys imbricata*) found alive with similar injuries. The repeated occurrence of such cases suggests a deliberate pattern, likely associated with harmful fishing practices, highlighting urgent conservation concerns.

## STUDY SITE

Figure 1. Map representing the Egyptian Red Sea and the location of the dive sites from which TWE contributors and the NP authorities collected marine turtle sightings.



## RESULTS

Number of individuals	Species	Incident Numbers
11	<i>Eretmochelys imbricata</i> (Linnaeus, 1766)	1, 2, 3, 4, 6, 7, 9, 10
1	<i>Chelonia mydas</i> (Linnaeus, 1758)	5
1	NA	8

## METHODS

The data collected through the Turtle Watch Egypt 2.0 project have been instrumental in the analyses of intentionally injured turtles.

### Dead

- Hit on the head. Reported by: Adam Lee Schwartzentruber Date: 12/2018
- Two turtles found in pieces, hits on the heads. Reported by: Saguaro Team Date: 04/02/2019
- Turtle found with no head, stranded for a long time. Reported by: Kylie Bartelli Date: 24/04/2019
- Three turtles found in pieces: heads and carapaces cut off. Reported by: Zakaria Mohyeldin Date: 06/05/2019
- Body found stranded after a long time. Reported by: Simona Svanini Date: 09/2019
- Turtle with a hit on the head, cuts on the plastron. Reported by: Angela Ziltener Date: 02/03/2021
- Turtle found with no head, skin removed from carapace and flippers. Reported by: National Parks Authorities, Date: 02/04/2021
- Reported by: National Parks Authorities Date: 22/06/2022
- Turtle found with no head, skin removed from carapace and flippers. Reported by: Ahmed Ghallab Date: 2023

### Alive

- Turtle found in the sea, stranded alive, with skin removed from carapace and head. Died after three days. Reported by: Hussein Ghanem Date: 11/11/2024

## DISCUSSION

Sightings of dead turtles with similar damage along the Egyptian Red Sea coast indicate a troubling, deliberate pattern of harm, likely linked to certain fishing practices, as suggested by environmental authorities. The specific targeting of the turtles' heads and carapaces leaves them highly vulnerable to infection, exposure, and eventual death from starvation, regardless of their immediate survival. The recurrence of such incidents underscores an urgent need for investigation and action.

For the first time, we now have documented data on this phenomenon along the Egyptian coast, which pushes us to pursue further studies and initiate new collaborations to better understand the scale of the problem.

## WHAT'S NEXT?

In response to these events, the NP and TWE, are planning workshops to engage fishermen, promoting awareness on the conservation importance of marine turtles. Additionally, the NP and TWE are organizing surveys to assess the extent and impact of these incidents on the local turtle population. These efforts aim to raise awareness, correct misconceptions, and foster shared responsibility for protecting critically endangered sea turtles, crucial for marine ecosystem health and regional fishing sustainability. There is also a pressing need to organize specialized training courses for local veterinarians who can respond effectively to such cases under the guidance of international experts. This highlights the necessity of securing funding to support these training programs and ensure sustained conservation efforts. In summary, a coordinated approach of education, law enforcement, and community involvement is essential to protect the critically endangered sea turtles of the Red Sea.



## ACKNOWLEDGMENT

We are deeply grateful to the National Park for its invaluable collaboration in gathering these data, which has been crucial in highlighting this pressing issue. We hope this partnership will continue, allowing us to work together toward a stronger impact on the conservation of sea turtles in the region. We also want to thank all the individuals who support our work every day by sharing their sightings and contributing through our official channels. Your efforts are invaluable in helping us better understand and protect marine life.