J. Black Sea/Mediterranean Environment Vol. 31, No. 2: 125-129 (2025)

SHORT COMMUNICATION

Observation of a loggerhead sea turtle *Caretta caretta* (Linnaeus, 1758) at Algiers coast, Algeria: A new record

Nawal Kaïdi- Boudjellal, Benyahia Boudjellal, Samir Grimes, Yakout Nawel Moussaoui

ORCID IDs: N.K.B. 0000-0003-2886-6845; B.B. 0009-0005-0976-1011; S.G. 0000-0001-7218-9680; Y.N.M. 0009-0000-6725-3633

Marine Resources Conservation and Valorization Laboratory, Environment-Marine Biodiversity Interaction Research Team, National School of Marine Sciences and Coastal Management, Algiers, ALGERIA

*Corresponding author: nawel.moussaoui20@yahoo.com

Abstract

On December 12, 2024, a live loggerhead turtle *Caretta caretta* (Linnaeus, 1758) was found trapped in a drift net on the shore of the research station of École Nationale Supérieure des Sciences de la Mer et de l'Aménagement du Littoral, near Sidi Fredj, about 24 km west of Algiers, Algeria. The individual had a heart-shaped carapace with five pairs of lateral plates, the first of which is adjacent to the precentral plate. The upper coloration is reddish-brown with light spots. The plastron was yellow with orange spots. Each front fin contained two claws. After being rescued and identified by the research station team, the turtle was released into the sea. In Algeria, where the Mediterranean coasts are potential nesting sites for this species, effective safeguarding measures must be implemented. Although the research team was successful in freeing it from the drift net, the incident highlights ongoing threats such as marine pollution, accidental fishing, and habitat degradation.

Keywords: Sea turtle, *Caretta caretta*, Algeria, Mediterranean Sea, endangered species, bycatch

Received: 06.04.2025, **Accepted:** 26.06.2025

The loggerhead sea turtle (*Caretta caretta*) is the most common species in the Mediterranean Sea among all sea turtle species (Casale *et al.* 2018). It is currently classified as "Vulnerable" under criteria A2b by the IUCN Red List of Threatened Species (Casale and Tucker 2017). *Caretta caretta* is particularly vulnerable to threats such as habitat degradation, bycatch in fishing gear, ship strikes, debris

ingestion and climate change effects, which are the main factors responsible for the overall decline in populations (Casale *et al.* 2018; Báez *et al.* 2019).

A study conducted in Algeria in 1989 examined 16 beach samples, covering a total length of 73.9 km across primary sandy regions, with each sample analyzed between one to seven times (Bjorndal *et al.* 1990), revealing no traces of loggerhead turtles. Surveys conducted to identify sea turtle nesting sites along the Algerian coast have verified the existence of one *C. caretta* hatchling at Tamanart "Skikda" in eastern Algeria (Benabdi and Belmahi 2020). This study substantiates the hypothesis posited by Carreras *et al.* (2018) that the western Mediterranean may harbor a population of nesting loggerhead turtles. This hypothesis was recently reinforced by the first formal observation of a nesting loggerhead turtle in Algeria (Ahmim *et al.* 2024).

In the morning of December 12, 2024, a live turtle was found trapped in a drift net on the shores of the research station of the National School of Marine Sciences and Coastal Management in Sidi Fredj [36.759283N, 2.842441E], approximatively 25 km from Algiers (Figure 1).

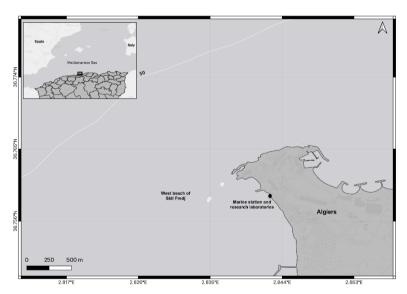


Figure 1. Observation site of a loggerhead sea turtle (*Caretta caretta*) near Sidi Fredj, Algiers, Algeria

The search team succeeded in freeing the individual, who measured 53 cm and weighed around 35 kg. The carapace was heart-shaped, with five pairs of lateral plates, the anterior pair abutting the precentral plate. The plastron contained three pairs of inframarginal plates (Figure 2).

The upper surface was reddish brown with light spots, and the plastron was yellow with diffuse orange spots (Dodd 1988; Deidun and Schembri 2005; Lee *et al.* 2014). Each small fin had two claws (Figure 3). *Caretta caretta* (Linnaeus, 1758) was photographed and identified as a young turtle. The turtle was then released into the sea. Approximately 650 meters from the research station, a small islet is present, contributing to the local coastal ecosystem. While not identified as a nesting site, it may serve as a feeding or resting area for marine species, including sea turtles.



Figure 2. Live *Caretta caretta* entangled with fishing nets in Sidi Fredj (Algiers) on December 12, 2024



Figure 3. Caretta caretta after removal of the net in Sidi Fredj (Algiers) on December 12, 2024

In Algeria, one of here the Mediterranean countries which have potential nesting sites for this species, effective protection measures must be implemented. The discovery of a live turtle trapped in a drift net near Algiers demonstrates the difficulties this species faces in its natural habitat. Although the search team managed to free the turtle, the incident highlights one of current threats such as marine pollution, bycatch in fishing gear and habitat degradation. Finally, the survival of this iconic species will be dependent on coordinated efforts to protect its habitat and to mitigate human threats.

Acknowledgments

We wish to convey our appreciation to Mrs. Gabriela Kouahla for her help in translating the paper.

Competing interest: No potential conflict of interest was reported by the authors.

Ethics committee approval: There is no necessity for ethical approval for this research.

Financial disclosure: This research did not receive any specific grant.

Author contributions: All authors contributed to the article and approved the submitted version.

References

Ahmim, M., Boutebiba, R., Leulmi, K. (2024) Formal observation of the first nesting of the loggerhead *Caretta caretta* (Linnaeus, 1758) in Algeria. *MOJ Current Research & Reviews* 5(1): 1-3.

Báez, J.C., García-Barcelona, S., Camiñas, J.A., Macías, D. (2019) Fishery strategy affects the loggerhead sea turtle mortality trend due to the longline bycatch. *Fisheries Research* 212: 21-28.

Benabdi, M., Belmahi, A.E. (2020) First record of loggerhead turtle (*Caretta caretta*) nesting in the Algerian coast (southwestern Mediterranean). *Journal of the Black Sea/Mediterranean Environment* 26(1): 100-105.

Bjorndal, K. (1990) Les tortues marines en Algérie et au Maroc (Méditerranée). *Bull. Soc. Harp. Fr* 55: 1-23.

Carreras Huergo, C., Pascual Berniola, M., Tomás, J., Marco, A., Hochscheid, A., Castillo, J.J., Gozalbes, P. (2018) Sporadic nesting reveals long distance colonisation in the philopatric loggerhead sea turtle (*Caretta caretta*). *Scientific Reports* 8: 1435.

Casale, P., Tucker, A.D. (2017) *Caretta caretta*. The IUCN Red List of Threatened Species 2017: e.T3897A119333622. https://dx.doi.org/10.2305/IUCN.UK.2017-3.RLTS.T3897A119333622.en

Casale, P., Broderick, A.C., Camiñas, J.A., Cardona, L., Carreras, C., Demetropoulos, A., Türkozan, O. (2018) Mediterranean sea turtles: current knowledge and priorities for conservation and research. *Endangered Species Research* 36: 229-267.

Deidun, A., Schembri, P. J. (2005) A report of nesting on a Maltese beach by the loggerhead turtle *Caretta caretta* (Linnaeus 1758) (Reptilia: Cheloniidae). *The Central Mediterranean Naturalist* 4(2): 137-138.

Dodd, C.K. (1988) Synopsis of the Biological Data on the Loggerhead Sea Turtle: *Caretta caretta* (Linnaeus, 1758). Fish and Wildlife Service, U.S. Department of the Interior, Washington, D.C., USA.

Lee, H.J., Kim, I.H., Kim, J.K., Jeong, S., Park, D. (2014) First detailed morphological description of the loggerhead sea turtle (*Caretta caretta*) caught from the Yellow Sea of Korea. *Journal of Ecology and Environment* 37(4): 201-208.