Marine Turtle Newsletter

Issue Number 154

July 2017



Leatherback sea turtle carcass found drifting in the Gulf of Oman off Fujairah. See pages 15-16. Photo by Balázs Buzás.

Articles

Records of the Hawksbill Sea Turtle (Eretmochelys imbricata) in the Canary Islands	N Varo-Cruz <i>et al.</i>
Season-long Sperm Storage and No Multiple Paternity in Green Turtles	
Nesting on Cousine Island, Seychelles	KP Phillips <i>et al.</i>
Sex Estimation by Geometric Morphometric Analysis of Loggerhead Sea Turtle Hatchlings	L Kircher & J Wyneken
A Leatherback Turtle Found Off Fujairah, United Arab Emirates	B Farkas et al.

Announcements Reports

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A Leatherback Turtle Found Off Fujairah, United Arab Emirates

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While surveying marine snakes in the Gulf of Oman on 11 January 2017, we came upon an adult leatherback turtle (*Dermochelys coriacea*) entangled in waste cordage and floating on its back at 25.1164°N, 56.4181°E, approximately 6 km east of Fujairah City, Emirate of Fujairah, United Arab Emirates. The sea surface temperature measured on site was 24°C at the time of the encounter. The turtle appeared to have died a few days earlier but was still in relatively good condition and bore no signs of predation (see photo on cover and Fig. 1). Closer inspection revealed the presence of a steel hook in the buccal cavity (Fig. 2).

Our finding constitutes the first record of this species in Fujairah waters. According to Gasperetti *et al.* (1993), *D. coriacea* is "rarely and irregularly observed in Arabian waters with no nesting area known in the Arabian Gulf or the Red Sea, nor on the coast and islands off southern Arabia." Salm *et al.* (1993) claimed that although there had been no reliable reports of leatherbacks nesting in Oman's beaches, it may still be possible that isolated instances may happen. Baldwin & Gardner (2005) also were certain that because leatherbacks have huge nests and deep tracks, none have been reported in the UAE and it is therefore unlikely that nesting occurs here.

One of the few published records from the Gulf of Oman closest to our location is based on two individuals seen as "flotsam," one of which was caught and brought to shore by a fishing trawler at Al Batinah, Oman in May 1979 (Ross & Barwani 1982). There is another, much less distant occurrence mapped by Gasperetti *et al.* (1993) apparently from the vicinity of Khor Kalba, Emirate of Sharjah, UAE but it is not linked to any reference. More recently Rezaie-Atagholipour & Barmoodeh (2012) reported on two carcasses recovered at roughly the same latitude on the Iranian coastline of the Gulf of Oman. Gardner (2013) gave no specifics except that "there are a few records of live leatherbacks off Dubai, Muscat, and Masirah." Fishing with trawl, drift, tangle and gill nets is known to be a major threat to sea turtles, accounting for the mortality of thousands of individuals annually (the large majority being *Chelonia mydas*) in Oman (Salm 1991). The cause of death of our leatherback specimen could not be determined due to the poor state of its organs but the strong bondage and the attached plastic canister employed as a buoy must have seriously if not lethally limited the animal's ability to dive, whereas the ingested hook must have made feeding an uncomfortable experience. On the other hand, its stomach and intestines were packed full with seaweed, indicating that the turtle had coped with its impairment surprisingly well (C. Berners-Schultheis, pers. comm.).



Figure 1. The leatherback upon its arrival in the taxidermy preparation room. The separation of cranial bones is due to decomposition.

Marine Turtle Newsletter No. 154, 2017 - Page 15



Figure 2. Steel hook swallowed by the turtle with tissue growing around it in the mucosa between the oral papillae.

The dimensions of our specimen were as follows: straight-line maximum carapace length = 136 cm, straight-line median carapace length = 132 cm, straight-line carapace width = 98 cm, head length = 29 cm, head width = 23 cm, tail length = 18 cm, weight = 115 kg. The body mass was remarkably low for a leatherback of this size. Application of the formula proposed by Georges & Fossette (2006) would give an "ideal" value of over 300 kg. However, dissection exposed a healthy amount of body fat and no symptoms of starvation (C. Berners-Schultheis, pers. comm.). On account of its short tail the turtle was identified as a female. The carcass is presently being skeletonized for later display in Fujairah.

Acknowledgments. We are greatly indebted to His Highness Sheikh Mohammed bin Hamad bin Mohammed Al Sharqi, the Crown Prince of Fujairah, United Arab Emirates for generously supporting our studies, Captain Roger Royes for indispensable services, Robert Baldwin, Director of Five Oceans Environmental Services LLC, Muscat, Oman for fruitful discussions about leatherback distribution, and Corina Berners-Schultheis, Head Taxidermist of the Central Veterinary Research Laboratory, Dubai, UAE for valuable information and photographs of the specimen.

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