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A rare stranding event of the short beaked common dolphin (*Delphinus delphis*) in the eastern Tunisian coastline

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Introduction

The Mediterranean subpopulation of the short beaked common dolphin *Delphinus delphis* (Linnaeus, 1758) is listed as endangered species in the IUCN red List. In the Mediterranean, stranding is more abundant in the extreme Western basin and in the northern Eastern basin whereas lesser records were observed in the Central region (Vella et al 2020, Fig 1.A). In Tunisia, stranding is very rare and only two documented events were reported in 1971 (Kartas, 1971) and in 2005 (Karaa 2013) respectively (Fig. 1.B). Population presence was documented in some occasions in northern Tunisian waters. Small groups were observed in Kelibia region (Ben messaoud et al. 2018) and only two individuals were detected off Tabarka waters in 2005 during a cetacean assessment campaign. This note reports a new stranding event in March 2021.

Materials and Methods

In Tunisia Cetacean stranding is monitored through a national stranding network established by the Institut National des Sciences et Technologies de la Mer (INSTM) since 2004. Three teams are involved to cover all Tunisian coasts from the North to the South. On March, 3rd 2021, the team of the centre region was alerted by a stranding of a dolphin in Hammamet beach (central Eastern Tunisia, fig 1.B). The team transported the animal to the sea turtle rescue center at INSTM of Monastir to perform a necropsy.

Results and Discussion

The stranded dolphin was identified as short beaked common dolphin. It was a freshly dead female which presented normal morphology and didn't show any injuries or external parasites. The necropsy showed that the dolphin was pregnant and was carrying an early-term female fetus with fully developed organs (Fig. 2). Detailed morphometric measurements were given in table 2 and 3. Samples of skin, fat, muscle and liver were collected and stored at -20°C.



Fig. 1. Stranding distribution of *Delphinus delphis*. A: in the Mediterranean (by Vella et al. 2021), B: in Tunisia. Red dots indicate historical data, the black dot indicates the present study stranding event



Fig. 2. Adult female and fetus of short beaked common dolphins stranded in eastern Tunisia

	Weight (kg)	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Mother	75	201	125	32	33	14	46	18	22	10	29	139	145	41	13
Fetus	3	62	-	13	13	4	16.5	6	11.5	4	12.5	45.5	47	14	6

Table.1. Morphometric measurments of both individuals

Examination of internal organs of the mother dolphin showed normal shapes with the absence of any abnormality. The digestive tract was completely empty with no food remains or marine debris. Although the necropsy was not conclusive to determine the exact cause of the death, infectious diseases are very frequent in dolphins and induced mortality in many cases.



Organs Weight (g)	
heart	498
liver	1570
lungs	1360
kidney	621
Intestines Tolal Length (cm)	1540

 Table 2. Organs weight and intestine length

 Fig. 3. Morphometric measurments of a dolphin
 of the mother dolphin

Ecotoxicological and parasitological analysis would be interesting for further investigation. Information reported here are important in improving knowledge on this species which recently showed a drastic population decline in the Mediterranean sea.

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We acknowledge the use of Maptool to draw the map (www.seaturtle.org/maptool)

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