

PPT05

Craniometry of bottlenose dolphins (*Tursiops truncatus*) from the Croatian Adriatic coast

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The typical bottlenose dolphin skull is elongated antorbitally and compressed postorbitally. Many cranium bones show variation in size and shape between individuals, they are therefore used for differentiation of subspecies and populations. The aim of this study was to describe bottlenose dolphin population from Croatian part of the Adriatic Sea by craniometric data. In order to account for potential ontogenetic variation, juvenile and adult individuals were separated based on degree of fusion of maxillary and premaxillary bones. Fifty-nine cranial measurements were taken from 96 adult specimens of bottlenose dolphin collected in Croatia from October 1990 to May 2011. Measurements were conducted with 0.5 – 0.01 cm precision using a caliper. Only one morphotype was recognized; however males and females significantly differed in 19 measurements, male skulls were more robust. Comparing the Croatian results with the same cranial measures of bottlenose dolphin from other seas showed that the skulls from the eastern Mediterranean Sea (Israeli coast) and from the Black Sea were significantly smaller. The western Mediterranean data did not differ from the Croatian. On a broader scale, populations from the eastern Atlantic Ocean, the North Sea, the north-western African coast, the South African coast and the Australian coast had significantly larger skulls compared to the Adriatic bottlenose dolphins. Populations from the Chinese waters and the eastern Floridian coast had significantly smaller skulls than the Adriatic dolphins.

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ABSTRACT BOOK

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prospects. The 27th ECS conference will promote informed insights and perceptions about how to shape a better future for marine mammals, and by extension, a better future for us all.

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