

PPT27

Ossification of flipper bones in bottlenose dolphins (*Tursiops truncatus*)

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Despite intensive research on bottlenose dolphins the ossification of its flipper bones remained unstudied. In order to study the ossification pattern of the bottlenose dolphin flipper, we examined 232 radiographs of the left and right flipper originating from 60 male and 57 female bottlenose dolphins with body lengths from 99 to 322 cm and age from 0 to 28 years. The radiographs originated from bottlenose dolphins found dead from October 1990 to January 2010 in the Croatian part of the Adriatic Sea. Ossification centers of flipper bones were identified and their fusion was evaluated. Our study showed that ossification of the flipper progresses from proximal towards distal bones. We designed equations and graphs based on stages of ossification for estimating important biological characteristics such as body length, body mass and age of the bottlenose dolphin. These equations can be used to estimate important biological data in cases where only bone remains of bottlenose dolphins are found.

27th Conference of the European Cetacean Society

Setúbal, Portugal 2013



ABSTRACT BOOK

27th CONFERENCE OF THE EUROPEAN CETACEAN SOCIETY

INTERDISCIPLINARY APPROACHES IN THE STUDY OF MARINE
MAMMALS

8th-10th APRIL, SETÚBAL, PORTUGAL



Abstract book: 27th Annual Conference of the European Cetacean Society

Cover photo: Erica Sá

Page 4 photo: Francisco Martinho

Edited by: Escola de Mar, www.escolademar.pt, info@escolademar.pt

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