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(5) Abstract title:	MULTIDISCIPLINARY APPROACH TO THE STUDY OF <i>TURSIOPS TRUNCATUS</i> PREGNANCY: A CRUCIAL VALUE?
(6) Abstract:	<p>Pregnancy in all mammals is characterized by a progression of biological and behavioural factors that lead the animals to reproduce successfully. The relative weight of each factor is still uninvestigated in almost all cetaceans, since the research is generally focused on one or a few aspects. In order to attempt an integrated approach to the study of <i>Tursiops truncatus</i> pregnancy, we report data on three different disciplines – behaviour (A), physiology (B) and acoustics (C). Ultrasound pregnancy confirmation in two females gave us the opportunity to conduct a simultaneous investigation across the three approaches. A) As for the ethological approach, “Individual follow continuous sampling” method with specific ethogram was applied to monitor the females’ behavioural repertoire with a total number of 192h of observation. B) Physiological investigation included the examination of respiration rates - 192 sessions lasting 15min each – and blow samples weekly collection - in order to hopeful point out possible perturbations of stress hormones. C) Acoustic signals were analyzed twice a month during 1-hour long free-swimming session by means of Brüel & Kjær Type 8105 hydrophone and Matlab platform. Some locomotory and postural displays together with social preferences revealed specific trends (both in frequency and duration) while approaching parturition also underlined by a significant increase of apnea duration. In like manner, pregnancy seemed affect the acoustic habits of the subjects, slowing down the number of the emitted clicks. Far to provide complete answers, this multidisciplinary approach seems to make available significant information on bottlenose dolphin pregnancy via remote, non invasive sampling. Results obtained from cross analysis help in avoiding false indication of imminent delivery, sometimes coming from singular flexions patterns or from a not-related-to-birth period of withdrawing from association with other animals. Further studies are strongly recommended for the acquisition of multidisciplinary relevant information to manage successful breeding programs.</p>
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