9th April 10:40

Seasonal variability in cetacean presence in the Pelagos Sanctuary: Implication for conservation purposes

Antonella Arcangeli[1], Lea David[2,3], Nathalie Di Meglio[2,3], Luca Marini[4], Mayol P.[5], Aurelie Moulins [6], Massimiliano Rosso[6], Paola Tepsich[6], Cristina Luperini[4], Anna Ruvolo[4], Sandrine Serra[2]

(1) ISPRA, Dip.Difesa dell'ambiente, V.Brancati 60, 00144, Rome, Italy
(2) EcoOcéan Institut, 18 rue des Hospices, 34090 Montpellier, France
(3) GIS3M, Hyères, Castel Sainte-Claire, France
(4) Accademia del Leviatano, V.le Astronomia 19 00144, Rome, Italy
(5) Souffleurs d'Ecume, Hôtel de ville, 83170 La Celle, France
(6) CIMA Research Foundation, Savona, Italy

antonella.arcangeli@isprambiente.it

A synoptic large-scale cetacean monitoring program has been realized within the PELAGOS Sanctuary by a network of research organisms, using ferry as platform of observation. The four sampled transects were regularly distributed over the Sanctuary: Tolon-Ajaccio (TA) in the western part, Nice-Calvi (NC) and Savona-Bastia (SB) in the central area and Livorno-Bastia (LB) in the eastern part. All transects were weekly monitored all year round on TA and SB (February 2011-March 2012) and during summer on NC and SB. Results confirm the high spatio-temporal variability occurring within the PELAGOS Sanctuary both in species presence and relative abundance. The four frequently sighted species were *Stenella coeruleoalba* (Sc), *Balaenoptera physalus* (Bp), *Tursiops truncatus* (Tt), *Physeter macrocephalus* (Pm). *Grampus griseus*, *Delphinus delphis*, *Globicephala melas*, *Ziphius cavirostris* where mainly sighted on the central routes (NC and SB). The effort-weighted species richness varied a lot on inter- and intra-transects levels and by seasons. During summer, the higher Encounter Rates (ER=sightings/100 km on-effort) per species were recorded in the western part of the Sanctuary (ERNC=6,284Â±0,674; ERTA=3,617Â±0,306). Dolphin distributions reflect respective habitat preferences: the higher ER of Sc was recorded during summer on NC while the higher ER of Tt was obtained on LB. ER of Bp showed inverse seasonal line-trends on the two borders of the PELAGOS Sanctuary: the highest ER on TA was obtained during the summer that corresponded to the lowest ER recorded on SB. This trend may point out different uses of these areas. Pm showed a clear preference for the western area (TA) during summer season. The study highlight how different seasons and areas in the PELAGOS Sanctuary are of different

significance in term of species diversity, relative abundance and habitat use. In consequence, a multi-scale and multi-temporal managing approach would be of more valuable effectiveness for species conservation.

ABSTRACT BOOK

27th CONFERENCE OF THE EUROPEAN CETACEAN SOCIETY

INTERDISCIPLINARY APPROACHES IN THE STUDY OF MARINE MAMMALS

8th-10th APRIL, SETÚBAL, PORTUGAL

© Erica Sá

European Cetacean Society