

26TH EUROPEAN CETACEAN SOCIETY CONFERENCE
26TH-28TH MARCH 2012, GALWAY IRELAND

INFORMATION AND IDEAS WORTH SHARING



GALWAY, IRELAND 2012

AB 16**A fixed line transect network to monitor cetacean diversity in central-western Mediterranean Sea**

Antonella Arcangeli (1), Paola Tepsich (2), Roberto Crosti (1), Aurelie Moulins (2), Ilaria Campana – (3), Stefania Carcassi (3), Mario Tringali (4) Cristina Luperini (5), Eugenio Internullo (4), Clara Monaco (4), Elisa Muzi (5), Anna Ruvolo (5), Lea David (6), Nathalie Di Meglio (6), Thierry Houard (7), Massimiliano Rosso (2), Giuliana Pellegrino (4), Francesca Fabiano (8), Stefano Floridia (4)

- (1) ISPRA
- (2) CIMA Foundation
- (3) Accademia del Leviatano
- (4) Ketos
- (5) Università di Pisa
- (6) EcoOcean Institut
- (7) Pelagos France
- (8) BDRI

antonella.arcangeli@isprambiente.it

Cetacean has been widely studied in Mediterranean Sea since late 1980s but we are still far from a true comprehension of pattern of presence and distribution of the species, mainly due to the uneven spatial and temporal coverage of researches and to the use of different methodologies that prevent the possibility of gathering together data coming from different studies.

Since 2007, systematic cetacean monitoring using ferries as observation platforms along fixed transect lines lead to a continuous monitoring of cetacean presence. Up to 2011 the network increased from 1 to 7 inter-regional ferry routes allowing a synoptic large scales sampling in central-western Mediterranean Sea (2.000 km weekly monitored during summer). In 2011 the network entered the Pelagos-France research programme as tool for monitoring cetacean population within the Pelagos Sanctuary.

Since 2007, the network travelled 90.600 Km under an effort of 1.683 hr, with 2.334 sightings of almost 15.200 animals. Data on all cetacean species presence, distribution and relative abundance are displayed and discussed year by year in order to point out the spatio-temporal variability observed. Special attention is given to fin whale in order to highlight data that can help in the understanding of specie migration pattern in the Mediterranean basin. Concern is express about cetacean diversity in central Mediterranean Sea as only *S.coeruleoalba*, *T.truncatus* and *Balaenoptera* spp. occur quite regularly in almost all the monitored areas while other species, known to be regular in the Mediterranean region, are quite rare and extremely confined. Moreover, minimum frequency and spatio-temporal scale needed for efficient monitoring programmes in the contest of the legislative framework goal is discussed.