5th June 2013

8.00 Registration and Poster Setup

9.00 Opening of Workshop
   M. Cristina Fossi – Workshop Chair
   Stefano De Ranieri - Società Italiana di Biologia Marina (SIBM)
   Representative of Tuscany Region
   Welcome by the Rector of the University of Siena

Key note speaker: Marine Policies
9.30 Designing Marine Policies for the 21st Century
   M.H. Depledge, European Centre for Environment and Human Health, University of Exeter Medical School, Exeter, England

DESCRIPTOR 10 - Marine Litter
Chairs – F. Galgani, M.C. Fossi

Key note speaker: marine litter
10.00 Litter and microlitter within the European Marine Strategy Framework Directive (MSFD): Indicators for descriptor 10, GES and monitoring
   F. Galgani, F. Claro - Ifremer, Bastia, France

10.30 Composition, spatial distribution and sources of floating marine macro litter, in the Tuscan-Corsica marine ecosystem in the Pelagos Sanctuary, monitored along a transborder transect
   C. Luperini, A. Arcangeli, A. Castelli – University of Pisa, Pisa, Italy

10.45 First data on ingestion of marine litter by loggerhead sea turtles, Caretta caretta, in Italian waters (Mediterranean Sea)

11.00 Coffee break and Poster Session

DESCRIPTOR 10 - Marine Litter
Chairs – F. Galgani, F. Bentivegna

11.30 Marine litter in loggerhead sea turtles (Caretta caretta) from Central and Southern Italian waters: analysis from dead and alive turtles
   A. Travaglini, M. Matiddi, M. Ciampa, L. Alcaro, F. Bentivegna - Stazione Zoologica Anton Dohrn, Naples, Italy
11.45  Five years data on interaction between loggerhead sea turtles and marine litter in Sardinia
A. Camedda, M. Matiddi, G. Massaro, S. Coppa, A. Perilli, A. Ruiu, P. Briguglio, G. A. de Lucia - IAMC-CNR Oristano Section, Oristano, Italy

Key note speaker: microplastic

12.00  Large filter feeders marine organisms as indicators of microplastic in the pelagic environment: the case studies of the mediterranean fin whale (Balænoptera physalus) and basking shark (Cetorhinus maximus)
M.C. Fossi, C. Panti, D. Coppola, M. Baini, M. Giannetti, C. Guerranti, L. Marsili, S. Clò, E. de Sabata - Department of Environment, Earth and Physical Sciences, University of Siena, Siena, Italy

12.30  Neustonic microplastic in the Sardinian coast (Central-Western Mediterranean Sea): amount, distribution and impact on zooplankton
G.A. de Lucia, M. Matiddi, A. Camedda, S. Coppa, I. Caliani, T. Campani, M. Giannetti, D. Coppola, C. Panti, M. Baini, C. Guerranti, M. C. Fossi, L. Alcaro – IAMC-CNR Oristano Section, Oristano, Italy

12.45  Experimental approach for a qualitative assessment of the potential chemical and biological effects of pollution caused by microplastics on the food chain
T. Romeo, C. Pedà, P. Battaglia, M.C. Fossi, F. Andaloro - ISPRA, Messina, Italy

13.00  The Impact of Awareness. How Ecotourism Can Help to Improve Coastal Conditions and Marine Environments
M. Peruzzo – Independent researcher, Alessandria, Italy

13.15 Lunch and Poster session

MSFD- National and Regional implementation
Chair – M.C. Fossi


14.45  The role of the Italian regions in the implementation of the European Marine Strategy Framework Directive – G. Ruberti – Tuscan Region, Florence, Italy
Bioaccumulation of trace metals and organochlorines in North-East Atlantic porbeagle sharks (Lamna nasus), by-caught in British waters

Legacy persistent organic pollutants in the common smooth-hound (Mustelus mustelus) from the Northern Adriatic Sea
S. Corsolini - Department of Environment, Earth and Physical Sciences, University of Siena, Siena, Italy

Evaluation of organochlorine levels in different species of Mediterranean elasmobranchs
L. Marsili, D. Coppola, F. Schillaci, M. C. Fossi, E. Sperone, S. Tripepi, P. Micarelli - Department of Environment, Earth and Physical Sciences, University of Siena, Siena, Italy

Preliminary data on trace elements in tissues of Greenland shark Somniosus microcephalus from NE Greenland
S. Ancora, N. Bianchi, G. Mariotti, J.S. Christiansen, C. Leonzio, S. Corsolini- Department of Environment, Earth and Physical Sciences - University of Siena, Siena, Italy

Genotoxicity biomarkers in Mediterranean pelagic species
I. Caliani, T. Campani, M. Giannetti, L. Marsili, S. Casini, M.C. Fossi–Department of Environment, Earth and Physical Sciences - University of Siena, Siena, Italy

Novel mussel haemolymph biomarkers: a system biology approach
S. Sforzini, C. Oliveri, F. Marsano, G. Digilio, E. Robotti, A. Viarengo – Department of Science and Technological Innovation, University of Eastern Piedmont, Alessandria, Italy

Genotoxic damage of benzo[a]pyrene in cultured sea bream (Sparus aurata L.) hepatocytes: harmful effects of chronic exposure
A.S. Pastore, M.P. Santacroce, M. Narracci, R.A. Cavallo, M.I. Acquaviva, E. Casalino, M. Colamonaco, G. Crescenzo - Department of Veterinary Medicine, University of Bari, Bari, Italy
**6th June 2013**

**DESCRIPTOR 8 – Contaminants and pollution effects**

*Chairs – A. Viarengo, M. Depledge*

**Key note speaker: contaminants**

**09.30**  
POPs in marine ecosystems: seabirds as sentinels of marine pollution  
*B. Jiménez, J.L. Roscales, J. González-Solís - Department of Instrumental Analysis and Environmental Chemistry, CSIC, Madrid, Spain*

**10.00**  
White-tailed sea eagle (*Haliaeetus albicilla*) as a sentinel species for effects of environmental contaminants – 48 years of monitoring in the Baltic Sea  
*B. Helander, E. Nyberg, A. Miller, S. Danielsson, A. Bignert - Environmental Research and Monitoring, Swedish Museum of Natural History, Stockholm, Sweden*

**10.15**  
Comparing temporal trends of PCDD/Fs and dl-PCBs in Guillemot eggs and Baltic Herring – Pros and cons for environmental monitoring  
*A. Miller, S. Danielsson, S. Faxneld, E. Nyberg, A. Bignert - Department of Environmental Research and Monitoring, Swedish Museum of Natural History, Stockholm, Sweden*

**10.30**  
Does eggshell thickness reflect today’s contaminant load?  
*S. Danielsson, E. Nyberg, A. Miller, H. Dahlgren, S. Faxneld, B. Helander, A. Bignert - Department of Environmental Research and Monitoring, Swedish Museum of Natural History, Stockholm, Sweden*

**10.45**  
Preliminary results of anthropogenic pollutants in blubber and liver of bottlenose dolphins stranded in the Canary Islands, North Atlantic Sea  

**11.00**  
The bottlenose dolphin (*Tursiops truncatus*) as a marine biosensor to detect ocean health risks  
*A. Mancia, J.C. Ryan, F.M. Van Dolah, J.R. Kucklick, T.K. Rowles, R. S. Wells, P.E. Rosel, A.A. Hohn, L.H. Schwacke – Department of Life Sciences and Biotechnology, University of Ferrara, Ferrara, Italy*

**11.15**  
Coffee break and Poster Session
An in vitro approach to study genotoxic effects of titanium dioxide nanoparticles on fibroblasts from toothed cetacean skin biopsy and leukocytes
G. Frenzilli, M. Bernardeschi, P. Guidi, V. Scarcelli, P. Lucchesi, L. Marsili, M.C. Fossi, M. Nigro - Department of clinical and experimental medicine, University of Pisa, Pisa, Italy

Levels of chemical contaminants and porphyrins in Caretta caretta from the Mediterranean Sea: preliminary results
C. Guerranti, M. Baini, S. Casini, M. Giannetti, C. Mancusi, L. Marsili, G. Perra, M.C. Fossi - Department of Environment, Earth and Physical Sciences - University of Siena, Siena, Italia

Basal levels of inorganic elements healthy nesting loggerhead sea turtles (Caretta caretta): results from a large study on the nesting colony of Boa Vista Island (Cape Verde)
A. Zaccaroni, M. Silvi, O.P. Luzardo, L.D. Boada, C. Formigaro, J. Orós, M. Zumbado, M. Camacho - Department Veterinary Medical Sciences, School of Agronomy and Veterinary Medicine, Cesenatico, Italy

12.30 Lunch and Poster session

Monitoring cetaceans populations through aerial surveys and satellite telemetry in the Central Mediterranean Sea
S. Panigada - Tethys Research Institute, Milano, Italy

The Great White Shark, Carcharodon carcharias (Linnaeus, 1758), cosmopolitan top predator, sentinel of the state of health of the oceans
P. Micarelli, E. Sperone, S. Tripepi, S. Rizzuto, D. Coppola, L. Marsili - Centro Studi Squali, Aquarium Mondo Marino, Massa Marittima, Italy

Seabirds and Marine Strategy in Italy: from present gaps to future conservation
N. Baccetti, A. Ferri, F. Pezzo, A. Sorace, M. Zenatello - ISPRA, Bologna, Italy

Conservation status of marine bird species in the Tuscan Archipelago, an Assessment Area under MSFD reporting
F. Giannini, N. Baccetti, P. Sposimo – Parco Nazionale Arcipelago Toscano, Portoferraio, Italy

Knowledge of Marine Strategy Directive key parameters for the common bottlenose dolphin: a case study in the Western Mediterranean assessment area
G. Lauriano, N. Pierantonio, G. Donovan, S. Panigada - ISPRA, Rome, Italy
15.30 A cetacean biodiversity index to assess the quality of pelagic marine ecosystems
A. Azzellino, S. Gaspari, C. Lanfredi, G. Lauriano, S. Panigada, M. Podestà - Department of Civil and Environmental Engineering, Polytechnic University of Milan, Milan, Italy

15.45 Coffee break and Poster Session

16.1 A multi-disciplinary approach to define conservation units of bottlenose dolphins (*Tursiops truncatus*)
J. Giménez, E. Barón, M. Louis, P. Verborgh, P. Gauffier, M G. Forero, E. Eljarrat, D. Barceló, R. de Stephanis - Department of Conservation Biology, Estación Biológica de Doñana, CSIC, Sevilla, Spain

16.30 Preliminary characterisation of respiratory microorganisms in the long-finned pilot whale, *Globicephala melas*, from the Strait of Gibraltar, Spain: to blow or not to blow?

16.45 At the Heart of the Industrial Boom: Australian Snubfin Dolphins in the Capricorn Coast, Queensland, Need Urgent Conservation Action
D. Cagnazzi, M.C. Fossi, G J. Parra, P.L. Harrison, S. Maltese, D. Coppola, L. Marsili - Marine Ecology Research Centre, Southern Cross University, Lismore, Australia

17.00 Conclusive Remarks and Workshop recommendations
Panelists: M.H. Depledge, M.C. Fossi and G. Notarbartolo di Sciara

18.00 Close of Workshop
Posters:

001 Cultures of brain cells from gilthead sea bream (*Sparus aurata* L.) as a new *in vitro* model for ecotoxicological studies
*M.P. Santacroce*, M. Narracci, A.S. Pastore, R.A. Cavallo, A. Tinelli, M. Colamonaco, G. Crescenzo – Department of Veterinary Medicine, University of Bari, Bari, Italy

002 Hunting nanoparticle in fish: a trojan horse *in vivo* co-exposure to titanium dioxide and 2,3,7,8- TCDD in juvenile of european sea bass
*M.L.Vannuccini*, A. Trisciani, D. Marchi, C. Della Torre, S. Focardi, I. Corsi, Department of Environment, Earth and Physical Sciences - University of Siena, Siena, Italia

003 Phthalates in Atlantic bluefin tuna (*Thunnus thynnus*) specimens from Mediterranean (Sardinia, Italy): levels and risks for human consumption
*C. Guerranti*, S. Badini, A. Cau, G. Perra, M. Renzi, S.E. Focardi – Department of Environment, Earth and Physical Sciences - University of Siena, Siena, Italy

004 Perfluorinated compounds in tuna (*Thunnus thynnus*) specimens from Mediterranean (Sardinia, Italy): levels and risks for human consumption
*S. Badini*, C. Guerranti, M. Renzi, G. Perra, A. Cau, S.E. Focardi – Department of Environment, Earth and Physical Sciences - University of Siena, Siena, Italy

005 Levels of Mercury and Methyl mercury in *Larus michaelliis* and *Larus audouinii* eggs from different breeding locations in the Iberian Peninsula
*M.G. Pereira*, A. Lawlor, A. Bertolero, C. Fernández-Gómez, S. Diaz, R.F. Shore, S. Lacorte - Centre for Ecology and Hydrology, Lancaster Environment Centre, Lancaster, UK

006 Mercury and selenium levels in eggs of *Larus Cachinnans* and *Larus audouinii* from Tyrrenhian sea island: temporal and geographical variation
*N. Bianchi*, C. Leonzio, N. Baccetti, P. Giovacchini, S. Ancora - Department of Environment, Earth and Physical Sciences - University of Siena, Siena, Italy

007 A non destructive biomarker approach to investgate the ecotoxicological status of seabirds
*S. Casini*, M. Baini, M. Giannetti, I. Caliani, T. Campani, M. C. Fossi, Department of Environment Earth and Physical Sciences, University of Siena, Siena, Italy

008 Monitoring persistent organic pollutants in juvenile loggerhead sea turtles (*Caretta Caretta*) Undergoing rehabilitation
*M. Camacho*, O.P. Luzardo, L.D. Boada, P. Calabuig, M. Bucchia, M. Zumbado, J. Orós –Veterinary Faculty, University of Las Palmas de Gran Canaria, Arucas, Spain

009 Levels of persistent organic pollutants (POPs) in plasma of *Caretta Caretta* after a period of rehabilitation in two different areas: Canary Island vs Adriatic Sea
*M. Bucchia*, M. Camacho, P. Roncada, F. Sori, G. Nardini, V. Angelini, L.D. Boada, M. Zumbado, O.P. Luzardo – Department of Veterinary Medical Sciences Alma Mater Studiorum, University of Bologna, Bologna, Italy
First evidence of induction of CYP1A in Caretta caretta skin biopsy slices treated with polycyclic aromatic hydrocarbons, organochlorines and polybrominated diphenyl ethers

M. Giannetti, S. Casini, L. Marsili, S. Maltese, T. Campani, L. Carletti, M. C. Fossi - Department of Environment Earth and Physical Sciences and Department of Life Sciences, University of Siena, Siena, Italy

Residuals of PCBs and organochlorine pesticides in samples of Stenella coeruleoalba stranded along the Ligurian coasts

G. Serluca, C. Fiori, I. Traversi, J. Alessi, B. Vivaldi, A. Mandich - DISTAV, University of Genoa, Genoa, Italy

Porphyrins levels in feces of free ranging fin whales living in Pelagos Sanctuary (Western Mediterranean Sea) as non-destructive biomarkers for contaminants exposure

M. Baini, D. Coppola, M. Giannetti, T. Campani, C. Panti, S. Maltese, S. Casini, L. Marsili, M.C. Fossi –Department of Environment Earth and Physical Sciences, University of Siena, Siena, Italy

Assessment of toxicological effects of plastic additives deriving from marine litter on Mediterranean fin whales by a gene expression approach

C. Panti, L. Marsili, S. Panigada, M. Baini, M.C. Fossi – Department of Environment Earth and Physical Sciences, University of Siena, Siena, Italy

Adsorption of PAHs to microplastics and trophic transfer to marine organisms

C.G. Avio, S. Gorbi, D. Fattorini, M. Di Carlo, F. Regoli - Polytechnic University of Marche, Ancona, Italy

Ingestion of plastic material by loggerhead turtle (Caretta caretta) and induction of porphyrins in excreta

M. Giannetti, M. Baini, T. Campani, M. Romano, S. Casini, L. Marsili, M.C. Fossi – Department of Environment, Earth and Physical Sciences - University of Siena, Siena, Italy

The Impact of Awareness. How Ecotourism can help to improve coastal conditions and marine environments

M. Peruzzo, Independent researcher, Alessandria, Italy