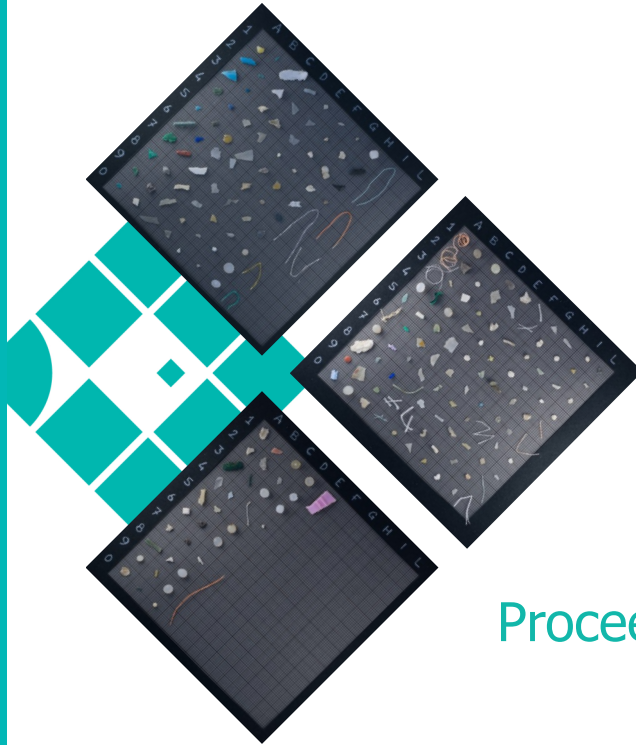


In the Wake of Plastics



DeFishGear



Proceedings of

In the Wake of Plastics

International conference



Università
Ca' Foscari
Venezia

Venice, October 13-15, 2015



Università Ca'Foscari Venezia

The international conference has been organized by Ca' Foscari University of Venice within the **DeFishGear project** (Derelict fishing gear management system in the Adriatic region).

Scientific Board:

- Prof. Dr. **Giulio Pojana**, University Ca' Foscari (UNIVE), Venice, IT
Dr. **Andrej Kržan**, National Institute of Chemistry (NIC), SL
Dr. **Tomaso Fortibuoni**, Institute for Environmental Protection and Research (ISPRA), IT
Dr. **Eleni Kaberi**, Hellenic Centre for Marine Research (HCMR), GR
Dr. **Aurelio Latella**, University Ca' Foscari (UNIVE), Venice, IT
Dr. **Davide Marchetto**, University Ca' Foscari (UNIVE), Venice, IT
Dr. **Cristina Mazziotto**, Agenzia Ambientale della Regione Emilia Romagna (ARPA), IT
Dr. **Andreja Palatinus**, Institute of Water of Republic of Slovenia (IWRS), SL
Dr. **Pero Tutman**, Institute of Oceanography and Fisheries (IOF), HR
Dr. **Thomas Vlachogianni**, Mediterranean Information Office for Environment, Culture and Sustainable Development (MIO ECSDE), GR
Dr. **Christina Zeri**, Hellenic Centre for Marine Research (HCMR), GR

Organizing committee: Aurelio Latella
Davide Marchetto
Sara Codognotto
Giulia Bologna

Editing: Aurelio Latella and Petra Horvat

For copies of this document please contact: LCM@unive.it

**POSTER SESSION****From Tuesday October 13th
to Thursday October 15th 2015****BEACH LITTER**

Po_01_BL	G. Pasternak – Classification and Spatial Distribution of Plastic debris along the Israeli coast
Po_02_BL	G. Poeta – Determining Beach Litter distribution and source in central Italy sandy shores
Po_03_BL	D. Bojanić Varezić – Marine litter – accumulation hot spots on the Croatian part of the Adriatic Sea

FLOATING LITTER

Po_04_FL	R. Crosti – Floating marine macrolitter between Sicily and Tunisia: results of a pilot survey
Po_05_FL	G. Suaria – Inter-annual and seasonal variability in the occurrence of floating macro-debris in the Northern Ionian and Southern Adriatic Sea
Po_06_FL	A. Pesic – Monitoring of floating litter in Bokakotorska Bay (Montenegro, South Adriatic)
Po_07_FL	M. Ramazio – Winter 2015 results on abundance, composition and distribution of marine macro-litter in the Adriatic-Ionian sea

MICROPLASTICS

Po_08_Mi	M. Torre – Air-borne microfiber contamination of marine fish gastro-intestinal contents during ingested litter stereomicroscopic analysis
Po_09_Mi	C. Tsangaris – Microplastics detection in marine biota: Methodological considerations
Po_10_Mi	J. Šiljić – The occurrence of microplastic debris in the sea surface and on the beaches of middle Adriatic Sea, Croatia

RIVERS AND WASTEWATERS

Po_11_RW	M. Kovak – The occurrence of microplastic debris in the sea surface and on the beaches of middle Adriatic Sea, Croatia
Po_12_RW	I.K. Kalavrouziotis – Microplastics and Wastewater Treatment Plants
Po_13_RW	R. Auriemma – Sewage outfalls: a source of macroplastics
Po_14_RW	P. Beza – Tracking litter accumulation sites at the riverbanks of Kalamas in Western Greece

SEA BOTTOM

Po_15_SB	Ch. Mytilineou – Anthropogenic litter from the deep bottom of the Eastern Ionian Sea
Po_16_SB	K. N. Papadopoulou – Fishermen's attitudes and perceptions on derelict fishing gear and marine litter: preliminary results from the Greek Ionian DeFishGear study
Po_17_SB	M. Pavičić – Fishing for litter activities in the fishing port Vira, island of Hvar, Croatia
Po_18_SB	T. Fortibuoni – Fishing for Litter pilot activity in Chioggia (Italy): a successful initiative
Po_19_SB	A. Anastasopoulou – Marine Litter collected by fishermen from the sea bottom off Corfu Island (Eastern Ionian Sea)
Po_20_SB	S. Somarakis – Spatial distribution and typology of marine litter off the coasts of Corfu: results from the DeFishGear experimental bottom-trawl surveys

Floating marine macrolitter between Sicily and Tunisia: results of a pilot survey

Crosti R.¹, Aissi M.², Andaloro F.¹, Arcangeli A.³, Pellegrino G.⁴, Ruvolo A.^{5,6}

¹ISPRA-IV Dip., ²Univ. Bizerte, ³ISPRA-Nat, ⁴Ketos, ⁵Ecosistemare, ⁶Accademia Leviatano.

roberto.crosti@isprambiente.it

Keywords: Canale di Sicilia, Marine hazard, Marine macrolitter, Damage to biota, Ghost nets

Both in the EU Marine Strategy Framework Directive and in the Barcelona Convention Ecosystem Approach (EcAp) there is the requirement to monitor that properties and quantities of marine litter do not cause harm to the coastal and marine environment and specific target have been established to reach the good ecological status of the marine waters.

Monitoring methods should be consistent across the marine region and relevant transboundary impacts should be taken into account. In addition States should establish and implement coordinated monitoring programmes. For this reason, within the framework of an ACCOBAMS co-funded project, the monitoring of the abundance, composition and distribution of marine macrolitter (items greater than 20cm) that floats in the waters between Sicily and Tunisia in the Sicilian Channel/Tunisian plateau was undertaken by research bodies of the two countries. Macrolitter is a direct indicator of litter that gets into the sea; it can impact marine life as animals can be entangled or can ingest floating plastic. Monitoring with visual surveys was undertaken from ferries allowing dedicated researchers to repeatedly sample the same transect (the route) also in high sea areas, which are usually difficult to reach with smaller vessels. The litter systematic monitoring protocol from ferries was specifically developed by an international network, coordinated by ISPRA, that monitors in the Mediterranean Sea cetaceans and their associated threats [1], litter categories were taken from the EU/JRC Guidance[2]. Considering the importance of the region for the fishing industry special care was undertaken for the monitoring of derelict floating fishing gear and drifting/lost FADs.

Based on approx. 400 km of effort (5 samples), results showed that density in nearby port/costal region was $2,5 \pm 0,3$ items \cdot km⁻² while values in high sea areas were 5 times less. Most of the items were artificial polymers (>70%) followed by processed wood (several board/beams larger than 50cm). One floating derelict net was recorded while no object resembling FADs were detected.

The monitoring of the area is just at its early stage, however future systematic surveys will set up an important baseline on the quantity of macrolitter/drifting fishing gear present in the region also allowing to evaluate the capacity of measures enforced to reduce waste ending up in the sea.

[1] Arcangeli A. et al (2015). Cetaceans, marine birds, sea turtles, marine traffic and floating marine litter: potential of a synoptic multi-disciplinary data collection in the Western Mediterranean marine region. *Biol. Mar. Med.* 21 (1): 366-368.

[2] Galgani F. et.al. 2013, Guidance on Monitoring of Marine Litter in European Seas, 128 pp. Scientific and Technical Research series, Luxembourg: Publications Office of the European Union.