



Pilot actions on marine litter monitoring in Adriatic



UNIVERSITÀ
DEGLI STUDI
DI PADOVA

WORKSHOP ON INGESTED MARINE LITTER MONITORING & ENTANGLEMENT EVIDENCES *Chioggia, Italy, 1-2 July 2019*

TERMS OF REFERENCES AND DRAFT AGENDA

❖ **Introduction**

The ACCOBAMS Secretariat collaborates with the Department of Comparative Biomedicine and Food Science of the University of Padova (BCA) to promote the use of a standardized cetacean necropsy protocol among the different stranding networks in the ACCOBAMS area, including for collecting data on ingested marine litter and entanglement evidences (in ghost nets or in active nets).

Marine litter has been recognized by the international community as a growing issue and a major threat to marine environment, in particular to marine biodiversity harming animals if they get entangled or ingest it. All marine fauna is impacted by interactions with marine litter, including threatened and endangered species such as cetaceans and sea turtles. However, only a few information is available on the extend of these interactions and on their long-term impacts (ecotoxicological consequences). Efforts are then needed to increase systematic data collection and monitoring.

This activity is supported by the Italian Ministry for the Environment, Land and Sea (IMELS) to develop pilot actions on marine litter monitoring in the Adriatic, with a view of supporting the development of collaboration with the MED POL program of the Mediterranean Action Plan mandated to assess and monitor the state of marine litter in the Mediterranean and to support the adoption of appropriate measures to tackle marine litter in the Mediterranean.

❖ **Objective**

The general objective of this workshop is to raise awareness and to train experts/pathologist from all Adriatic countries on collecting data on the interactions between marine litter and marine megafauna (cetaceans and sea turtles), considering both ingested marine litter and entanglement evidences.

The specific objectives of the workshop are to:

- Inform national experts on the issues related to interactions between marine litter and cetaceans/sea turtles
- Present methodologies and data collection protocols for monitoring ingested marine litter and entanglement evidences during necropsies
- Present national stranding networks functioning and identify gaps
- Discuss the best practices to implement monitoring program in the different countries



- Initiate the development of national stranding networks in some countries and strengthen regional cooperation among the stranding networks of the Adriatic countries.

❖ **Expected results**

At the end of the workshop, it is expected that the participants are informed on the impacts of interactions with marine litter and that they are able to perform cetaceans'/sea turtles' necropsies, including collecting data on ingested marine litter/entanglement evidences.

After the workshop, and using opportunistic strandings of cetaceans/sea turtles, it is expected to implement a one-year monitoring program on ingested marine litter & entanglement evidences in the Adriatic.

A report summarizing the presentation will be prepared at the end of the workshop.

❖ **Participants**

The workshop will gather around 13 participants from:

- **Albania:** *to be determined*
- **Croatia:** Faculty of Veterinary Medicine - University of Zagreb, State Institute for Nature Protection (Zagreb)
- **Italy:** Istituti Zooprofilattici Sperimentali Veneto, Emilia Romagna, Marche, Abruzzo e Molise and Puglia and Centro di Referenza Nazionale per la Diagnostica sui Mammiferi Marini (Cre.Di.Ma).
- **Montenegro:** *to be determined*
- **Slovenia:** Faculty of Veterinary Medicine of Lubjiana, Morigenos.

Representatives of the ACCOBAMS Secretariat and UNEP/MAP/MED POL (tbc) will also attend.

❖ **Meeting organisation**

The workshop will be held on the afternoon of 1st July and on 2 July 2019, in Chioggia, in the premises of the Department of Comparative Biomedicine and Food Science of the University of Padova (BCA).

❖ **Provisional agenda**

Day 1 – Monday 1 July 2019	
Session 1: Opening of the workshop	
14h30 – 15h00	Opening and introduction
Session 2: Introduction of the workshop theme	
15h00 – 15h30	Marine litter monitoring in the Mediterranean – the IMAP context (tbc)
15h30 – 16h00	Cetaceans of the Adriatic Sea: species abundance, distribution and main threats (S. Mazzariol, BCA)
16h00 – 16h30	Principle of anatomy, physiology and pathology of marine mammals (S. Mazzariol, BCA)
16h30 – 17h00	<i>Coffee break and group photo</i>
17h00 – 18h00	Stranding networks in ACCOBAMS and in the Adriatic with small presentation from participants on regional/national experiences (all national participants)
Day 2 – Tuesday 2 July 2019	
Session 3: Interactions between marine litter and marine megafauna	
9h00 – 9h45	The impact of marine litter on cetaceans: the ecotoxicological point of view. Characterization and analyses of plastic ingestion (Baini M., University of Sienna)
9h45 – 10h30	The impact of marine litter on cetaceans: the veterinary medicine point of view. Protocols and post-mortem findings (S. Mazzariol, BCA)
10h30 – 11h00	<i>Coffee break</i>
11h00 – 11h30	The impact of marine litter on other taxa in Adriatic: sea turtles (L. Di Renzo, IZSAM)
11h30 – 12h00	Types of plastic in the Adriatic Sea (F. Ronchi, ISPRA)
12h00 – 12h30	Discussion with single experiences from different stranding networks (all participants)
12h30 – 14h00	<i>Lunch</i>
14h30 – 16h00	Practical activities - Legnaro (PD)
16h00 – 16h30	<i>Coffee break</i>
Session 4: Conclusion and closure of the workshop	
16h30 – 17h00	Organization of the future works, data collection and further issues