



# National Conference on Marine Debris

---

## CoMaD2018

# Introduction

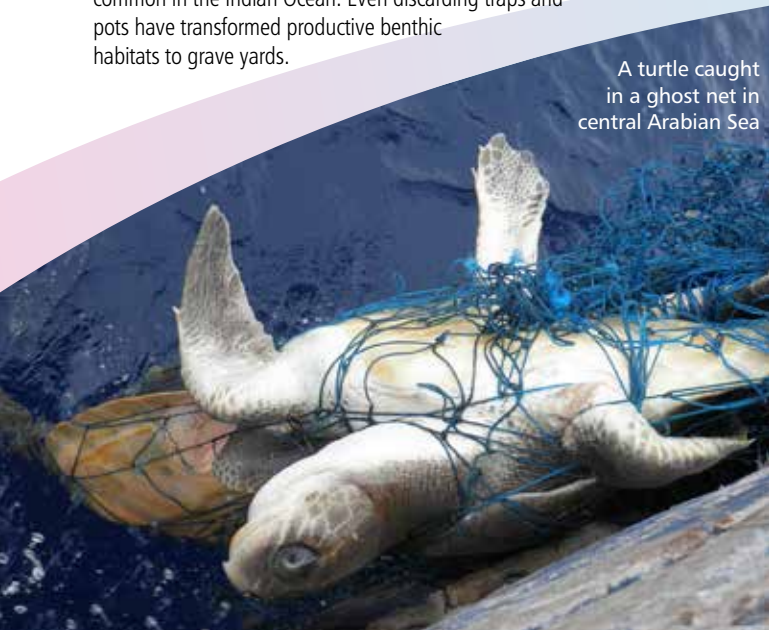
The oceans and coastal ecosystems are facing a new threat-the Marine Debris. Most researchers believe that this is worse than any other problem faced by aquatic ecosystems. Debris ranging from cigarette butts to large plastic sheets have emerged as the latest threat to sustainability of coastal and marine ecosystem, endangering the fauna, flora, the physical and chemical processes and ultimately the livelihood of thousands of fishers and farmers. Not only plastics, even other items like glass and metal which can be easily recycled also are thrown away as trash.

Recent studies have shown that there are 5.25 trillion pieces of plastic debris in the ocean. Of that mass, 269,000 tons float on the surface, while some four billion plastic microfibers per square kilometer litter the deep sea. The amount of plastic waste entering the ocean from land each year exceeds 4.8 million metric tons (MMT) and may be as high as 12.7 MMT.

Recent research on microplastics, which are pieces of plastic debris less than 5 millimeters and their role in the transfer of persistent organic pollutants to marine food webs has opened a new dimension to plastic pollution. As plastics get smaller and smaller, they release chemicals. One of those chemicals has been identified as bisphenol A which can interfere with animals' reproductive systems. Top predators such as sharks or dolphins, which eat the fish, accumulate the most chemicals. In India, micro and macro plastics have been observed at all trophic levels starting from sardines to tunas and sea birds.

Careless discard of torn nets leading to "ghost nets" or derelict fishing gear (DFG) has started impacting fishes, birds and marine mammals. Turtles entangled in ghost nets and with plastics stuck around their neck and beak are common in the Indian Ocean. Even discarding traps and pots have transformed productive benthic habitats to grave yards.

A turtle caught  
in a ghost net in  
central Arabian Sea



Plastic litter as well as metal and glass litter in marine ecosystems are completely avoidable problems. Through increased effort, inappropriate disposal of waste plastics can be prevented through a combination of education, product design, incentives, legislation and enforcement.

Research on marine debris in the Indian sub-continent is limited. Similarly public awareness on Marine Debris and the severity of the impacts on the sustainability of our coastal and marine ecosystem is low. Considering the fact that the marine debris problem can even completely destroy our productive ecosystem, if left uncontrolled, the Marine Biological Association of India is organising a National Conference on Marine Debris at Kochi on 11-12 April 2018.

## Sessions

The Symposium will have three sessions. First one targeting the research updates whereas the second session will be on the way ahead to control marine debris. The third will be a photo and video exhibition to create public awareness.

### Session 1: Marine Debris-Threats

This session will have one invited talk followed by oral presentations & posters. Posters can be single slide which will convey the message. Researchers from Universities, Institutes and other developmental organisations can present their research findings on the following themes.

- Regional assessments
- Impacts on resources/habitats
- Micro plastics in ecosystem
- Plastics in food chain
- Leaching of chemicals from plastics
- Ghost nets/fishing
- Mapping and modelling
- Impacts on livelihood- Fisheries/tourism/farming
- Impacts on coastal health

### Session 2: Marine Debris-Land and Sea based Management

This session will also have an invited talk on waste management and recycling of plastics. This session will have people's participation. The following themes will be covered.

- Success stories on waste management
- Removal and processing of accumulated marine debris
- Infrastructure for debris management models or prototypes for plastic waste recycling/processing

- New Packaging for reducing the use of plastics
- Policy – Strategies and implementation

The sessions will conclude with recommendations for future research directions and management.

## Photo/Poster session

The Symposium Expo will also display photographs and posters on the main theme “Marine Debris” contributed by researchers and public. More focus can be on

- How the coastal ecosystem has degraded over the years.
- Clean up activities, monitoring
- Inspirational clean- up programs

These will be digital posters/ photos.

## Exhibition

The Government organizations, NGOs, entrepreneurs and other business units related to recycling and litter management including degradable and non-degradable can participate in the exhibition arranged at the venue of the conference.

## Short Video Competition

Short videos (max 4mb, 45 seconds) conveying a crisp message can be submitted in a new competitive section. Details will be provided in the website.

## Registration fee

Students	:	Rs 1500	Non-members	:	Rs 3000
MBAI members	:	Rs 2000	Spouses	:	Rs 1000

## Abstracts

To be submitted on-line. Specifications on abstract, size for photo and poster will be placed in the MBAI web site soon. All submissions can be submitted as full paper which will be peer reviewed and published by the Journal of the Marine Biological Association of India.

## Awards

- There will be awards for best oral and poster presentation.
- Best Photograph on marine debris (impact/ situations)
- Best success story on land based waste management for local governing bodies / municipalities /districts
- Best short video

## Dates to remember

- Registration: February 1 to March 15, 2018
- Submission of abstracts: February 1 to March 31, 2018
- Last date for submission of photographs for contest: March 31, 2018

Dolphin fish (*Coryphaena hippurus*) gut with macroplastics





A ghost net washed ashore in Vypin Island



## Contact

Convener

**Dr. V. Kripa**, Principal Scientist, CMFRI

Email: [mbaicomad@gmail.com](mailto:mbaicomad@gmail.com)

Co-Conveners

**Dr. P. Kaladharan**, Principal Scientist, CMFRI

**Dr. D. Prema**, Principal Scientist, CMFRI

**Dr. R. Jeyabaskaran**, Senior Scientist, CMFRI

**Dr. Shelton Padua**, Scientist, CMFRI

Watch out for updates at the web site [www.mbai.org.in](http://www.mbai.org.in)



**MBAI**  
Marine Biological Association of India

P O Box 1604, CMFRI Campus, Kochi 682 018, Kerala, India