

METADATA (*)

TOPIC 7 – Training Unit 1: Marine litter

Source Partners: WWF-UNIGE DISTAV-AMP The training unit is developed for the EcoeFISHent project (www.ecoefishent.eu)
Ownership Authors: Erica de Rysky, Sustainability officer WWF Italia Francesco Enrichetti, DISTAV – University of Genova Valentina Cappanera – AMP Portofino The training material is provided under Creative Commons Attribution Share-Alike License (https://creativecommons.org/licenses/by-sa/4.0/deed.en).
Abstract <i>Plastic pollution profoundly impacts marine ecosystems, threatening biodiversity and ecosystem health. Plastic debris alters marine habitats, disrupting natural processes like nutrient cycling and sedimentation. Physical entanglement and ingestion of plastics harm marine organisms, leading to habitat degradation and species decline. Microplastics infiltrate marine food chains, posing risks to aquatic life and human health through bioaccumulation. Moreover, economic repercussions arise from reduced fisheries productivity and tourism declines. A global action is imperative to safeguard marine biodiversity and the well-being of future generations. Mitigation activities need interdisciplinary efforts spanning policy, education, and innovation to preserve marine ecosystems and ensure sustainable ocean management.</i>
Structure The training unit is structured in three lessons: Ocean plastic pollution <i>The marine plastic pollution is analyzed by considering the sources and the impacts of macro and microplastics on marine species and habitats with a perspective on potential risks at ecosystem level and for human health.</i> Ghost Gear impacts <i>The fate of derelict fishing gear in the ocean is analyzed by considering their deleterious effects on marine wildlife, habitats, and human society.</i> Ghost Gear possible solutions in an MPA <i>Lost fishing gear causes severe and chronic damage to habitats and benthic organism compromising ecosystem functionality that also becomes more sensitive to other type of impact such as climate change.</i>
Learning Outcomes After this Training Unit, the trainees will be able to: - be aware of the global environmental problem of marine plastic pollution - take actions to reduce marine plastic pollution

- disentangle among the several terms currently used to identify ALDFG, identify the main components and materials of which ALDFG are made
- distinguish among the different deleterious effects they produce on marine wildlife, habitats, and human society
- be aware of the GG issue in an MPA
- understand the importance of engaging the different stakeholders, including the fishers, in the GG actions and raise awareness among them

Intended Audience: *EcoeFISHent partnership, EcoeFISHent stakeholders interested in Marine litter*

Pre-requisites: None

Language: English

Format: Presentations, web lecture. The module is a self-learning module

Expected workload: 30 mins

Complementary additional training material:

- Macfadyen G., Huntington T., Cappel R. 2009. *Abandoned, lost or otherwise discarded fishing gear*. UNEP FAO, Rome.
- WWF, 2019. *No plastic in nature. Assessing plastic ingestion from nature to people*. Report
- Tekman M.B. et al. 2022. *Impacts of plastic pollution in the oceans on marine species, biodiversity and ecosystems*, 1–221, WWF Germany, Berlin. Doi: 10.5281/zenodo.5898684
- United Nations Environment Programme, 2021. *From Pollution to Solution: A global assessment of marine litter and plastic pollution*. Nairobi.

(*) The structure of the Metadata for the Training Units derives from the training Metadata model developed within the Leonardo da Vinci project LINKVIT (2013-15, GA N. 2013-IT1-LEO05-04046)

