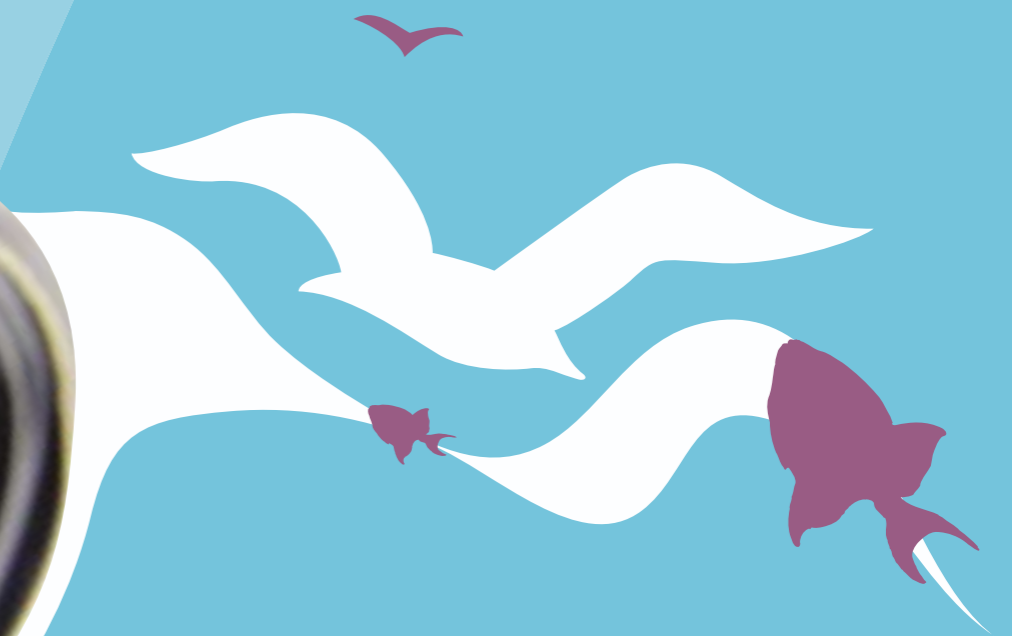


Keep the Mediterranean...



litter! FREE!



www.unep.org



www.unepmap.org



www.helmepa.gr



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Keep the Mediterranean litter-free

Marine Litter is waste produced by human activities, either on land or at sea, that finds its way into the marine environment. Plastics, rubber, paper, metal, wood, glass can be found floating on the surface of the sea, beneath the sea surface, washed up on the beaches or lying on the seabed.

The Mediterranean Sea faces a very serious marine litter problem and unless action is taken by each one of us and the competent authorities to **prevent, reduce and eliminate** this type of pollution, the situation will only become worse.

Where does marine litter come from?

The main sources of marine litter are domestic, industrial, shipping and agricultural activities that deliberately or by accident dispose of their waste directly or indirectly into the sea. Waste can travel big distances from its source by runoff, winds or sea currents.

The impacts of marine litter

On the coastal and marine ecosystem

Even the remotest parts of the Mediterranean are affected by marine litter. It spoils the landscape and may affect the marine ecosystem. Pollutants contained in litter are diluted into rainwater, freshwater or sea water and may enter the food chain.

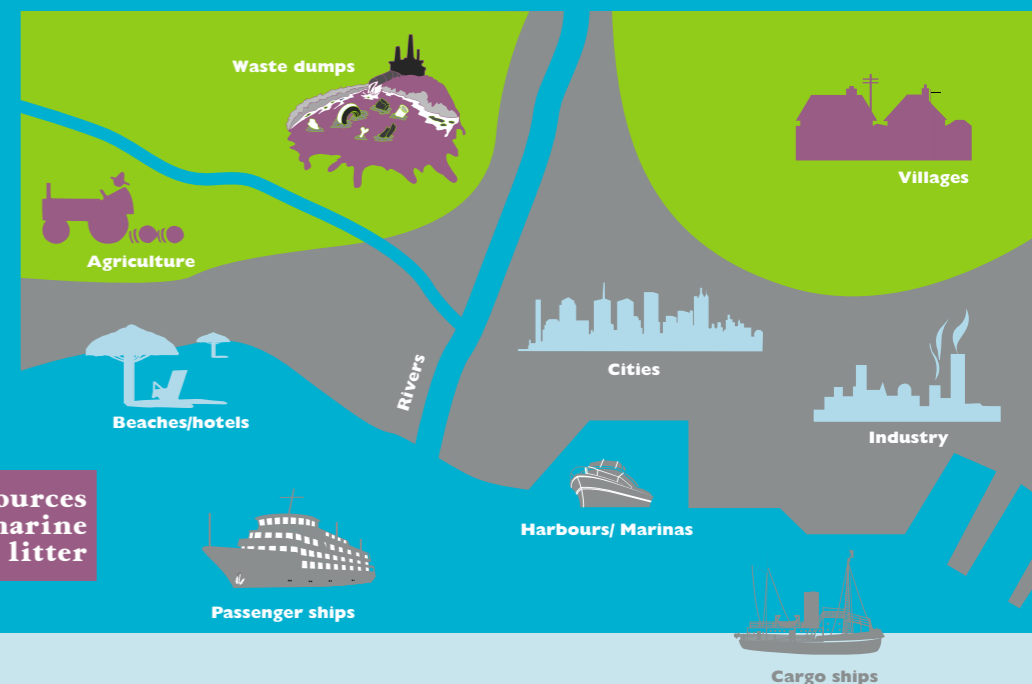
Marine animals such as fish, dolphins, whales, seals and birds are harmed by marine litter because they become entangled in it, wounded by it or mistake it for food. The results can be deadly: litter items can cause lethal cuts, hampered mobility, suffocation, drowning and when ingested may lead to poisoning, strangulation or starvation.

On humans

Marine litter affects every one of us and we all pay for the problems caused.

- It is a health hazard, causing infections, injuries and cuts (toxic substance containers, broken glass and cans, syringes, etc.).
- It spoils landscapes aesthetically, affecting our mood negatively.

- It deters tourists with serious implications for coastal communities dependent on tourism.
- It causes fouling of fishing gear and damage to boat propellers burdening the fishing industry with additional costs.
- It costs taxpayers and coastal authorities huge amounts of money to clean-up and dispose of.



The main sources of marine litter in the Mediterranean

80% from land-based activities: run-off • littered rivers emptying into the sea • rainwater sewers • sewage outlets • air-borne garbage • industrial waste • poorly managed landfill sites • careless disposal of rubbish on beaches **20% from activities at sea:** cargo and passenger vessels of all sizes (i.e. yachts, sailboats) • commercial and recreational fishing vessels (fishing lines and nets • polystyrene fish storage containers, etc.) • offshore oil and gas rig/platform debris.



Each one of us can contribute in keeping our Mediterranean sea free of the waste we produce

Be a responsible citizen:

- Always put your waste into bins and don't leave litter on coasts, don't drop litter in the sea. Litter on the street or in sewers will also most likely end up in the sea.
- Generate less waste when you travel or go to the beach: pack your food in reusable containers. Generally, **reduce, reuse and recycle** waste whenever possible.
- Dispose cigarette butts thoughtfully (i.e. in an empty cigarette box that you take with you): they impact on water quality and may harm marine life.
- Lobby your municipality to provide waste containers at beaches and manage them properly.

- Set an example to others and kindly request their respect towards the marine and coastal environment.

- Join a local environmental group and participate in beach clean-ups, local and global monitoring efforts and awareness raising campaigns.

The tourism sector:

- Increase the environmental awareness of your personnel and visiting tourists.
- Place disposal bins and ashtrays in strategic positions in your hotel, restaurants and on nearby beaches, and ensure that they are regularly emptied, cleaned and properly managed.
- Organise regular clean-ups and support other environmental awareness raising activities.

- Reduce waste (from services, food packaging, etc.).
- Develop or join recycling programs.

Professional and recreational fishermen:

- Use biodegradable fishing equipment and bait bags when possible.
- Collect waste and dispose of it appropriately on land.
- Ask your local council and port authority for special disposal facilities at marinas and harbours.
- Cooperatives, unions and clubs should educate their members on why they should bring their waste to port rather than dump it at sea.

Industry:

- Develop "cleaner production" initiatives.
- Launch a "green office management" scheme.
- Develop an on-site reuse and recycling programme.
- Introduce Integrated Waste Management schemes.
- Train and sensitise your staff accordingly.

Cargo ships and passenger vessels of all sizes (including yachts and sailboats):

- Develop and implement a Garbage Management Plan and regularly update your Garbage Record Book (*).
- Increase the environmental awareness of officers and crew members through regular training.
- Integrate environmental concerns into yachting and sailing school curricula.
- Display motivational placards and other information material in prominent places on board to deter crew members and passengers from throwing garbage into the sea.
- Place appropriate disposal bins and

ashtrays on deck to reduce airborne litter.

- Reduce waste (from services, food packaging, etc.).
- Dispose of waste only at port reception facilities.

(*in accordance with IMO's MARPOL Annex V requirements).

Authorities (government, prefecture, municipality, port, etc.):

- Perform awareness-raising campaigns and education programmes for all stakeholders involved making the basic linkages between freshwater and the marine environment.
- Properly monitor and collect litter on beaches and in harbours. Collaboration between the port authorities and the local authorities is necessary.
- Establish an integrated municipal waste management system with priorities on waste reduction, recycling and safe disposal.
- Apply integrated coastal area management schemes, including provisions to involve stakeholders.
- Integrate local action with any relevant regional and global priorities, programmes and strategies.
- Provide financial support for preventive actions.
- Provide port reception facilities for the safe disposal of garbage by ships, pleasure crafts and fishing vessels.

Garbage bins, cans, boxes and dumpsters are common disposal facilities. But placing them at beaches and harbours is not enough. Emptying and cleaning them regularly is more of a problem. Their proper monitoring and management is necessary. Key issues to address: who collects the waste? when? where does it go?

How long does it take for marine litter to decompose?

Source: The Ocean Conservancy, "Pocket Guide to Marine Debris", 2006

glass bottle 1 million years	plastic cup 50 years	plywood 1-3 years
fishing line 600 years	tin can 50 years	waxed milk carton 3 months
plastic bottle 450 years	nylon fabric 30-40 years	apple core 2 months
aluminum can 80-200 years	plastic bag 10-20 years	newspaper 6 weeks
rubber boot sole 50-80 years	cigarette filter 1-5 years	orange peel 2-5 weeks
	woolen clothes 1-5 years	paper towel 2-4 weeks

