

# A GUIDE TO RESPONSIBLE BOATING



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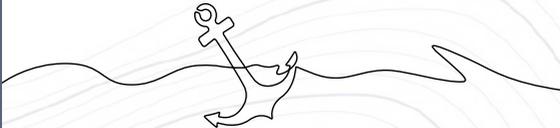
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# BOATERS, IT'S TIME TO ACT!

This guide is intended for all individuals for whom boating and water sports is a passion, hobby or lifestyle choice, as well as being an opportunity to reflect and take action against plastic pollution.

**Since 2016, The SeaCleaners association has been committed to reducing plastic pollution on land and at sea.** With our volunteers, we are rolling out awareness-raising activities, scientific research and waste collection programmes. On land, collection operations allow us to retrieve and categorise waste before it disperses, fragments, and becomes irretrievable. At sea, we use the MOBULA today, and the MANTA tomorrow, our environmentally-friendly collection boats.



# 1. PLASTIC POLLUTION, A GLOBAL THREAT TO THE OCEAN

## 1.1 A continuous flow of waste

Since the emergence of plastic just before the 20th century, its global production has continued to increase. An estimated 9.2 billion tons of plastic have been produced from 1950 to 2017,<sup>1</sup> with a significant increase since the 2000s.<sup>2</sup> This is primarily due to the many useful properties of different types of plastics, as well as our changing consumption habits.

This intense production now generates an astronomical amount of waste that we are frankly unable to manage.

Despite collecting, treating, incinerating and recycling some of this astronomical waste, over 22% of it still ends up in nature as macro or micro plastic particles.<sup>2</sup>

This pollution is then dispersed by winds and rain and ends up in streams and rivers. Indeed, in July 2023, a study<sup>3</sup> on 38 lakes in Europe, North America, South Africa and Asia showed that all the samples collected contained microplastic.

**The most vulnerable freshwater reservoirs**, lakes and rivers are located in densely populated and urbanized areas, and carry waste from the land to the Ocean.

**59 tons of plastic are dumped into Lake Lemán, Geneva, every year.**<sup>3</sup>



**EVERY YEAR, BETWEEN 9 AND 14 MILLION TONNES OF PLASTIC WASTE ARE DISCHARGED INTO THE OCEANS, THAT IS MORE THAN 17 TONNES PER MINUTE**<sup>4</sup>

17t/min = 

This pollution threatens the health of the ocean and its ecosystems, including marine flora and fauna. It also reduces the Ocean's carbon absorption capacity, further accelerating the effects of climate change, and degrading coastal landscapes. All of this has an impact on economic and tourism activities, making boating and water sports less attractive.

If we want to effectively take action to stop this continuous flow of waste, **it's important to identify its origin, distribution and movements.**

**UFOs, a sailor's nightmare**



Unidentified floating objects (UFO) refer in particular to man-made objects such as containers, nets or other plastic items. **A collision with a UFO can cause a lot of material damage to boats or physical damage to sailors**, making it the number 1 nightmare for skippers.

## 1.2 Where does marine waste come from?

**80% of the ocean's plastic waste comes from human activity on land.<sup>5</sup>**

When waste reaches the sea and ocean, its trajectory varies. Some waste remains on the surface in coastal areas and washes up on our beaches with the waves; other waste sinks and is carried along by currents which, when they converge, form vortices of waste (also called plastic soups). When exposed to light, water and microorganisms, this waste then degrades into small particles that are invisible to the naked eye: micro and nanoplastics.

The remaining 20%<sup>6</sup> of plastic waste comes directly from activities at sea: offshore platforms, fishing (40% of floating macro-waste), aquaculture, commercial transport, tourism, sport and leisure activities. Therefore, boaters also have an important role to play in reducing pollution.

**90% of traded goods are carried over the Ocean and seas.**



## 1.3 Marine waste in Europe

In 2016, a study conducted on 276 beaches across 17 European Union member states resulted in the creation of a database that collected, analysed, and classified 355,671 marine waste items.<sup>7</sup> Approximately 80 to 85% of these waste items (in terms of quantity) were made of plastic, while the remainder consisted mainly of wood, paper, or various construction materials. About **half of the identifiable plastics were single-use plastics**, such as bottles and caps, cigarette butts, cotton buds, chip packets, wipes, plastic bags, cutlery, straws, and more. The waste found on beaches serves as a reliable indicator for assessing the waste found in the ocean, particularly **macroplastics** (larger than 5mm in size).



Scientific research is crucial if we want to better understand the impact of plastic pollution and find ways to stop it dispersing.

However, the majority of current plastic waste in European and global waters exists in the form of **microplastics** (smaller than 5mm in size). These are **primary microplastics** that are directly released into the environment as small particles, such as textile fibers, cosmetic particles or those resulting from tire abrasion, among others. These are also **secondary microplastics**, which are formed through the degradation of larger waste items or macroplastics. The map depicting microplastic concentration in European seas by the National Oceanic and Atmospheric Administration (NOAA)<sup>8</sup> shows that these particles are present everywhere, at different concentrations. **All European seas and oceans are affected.**

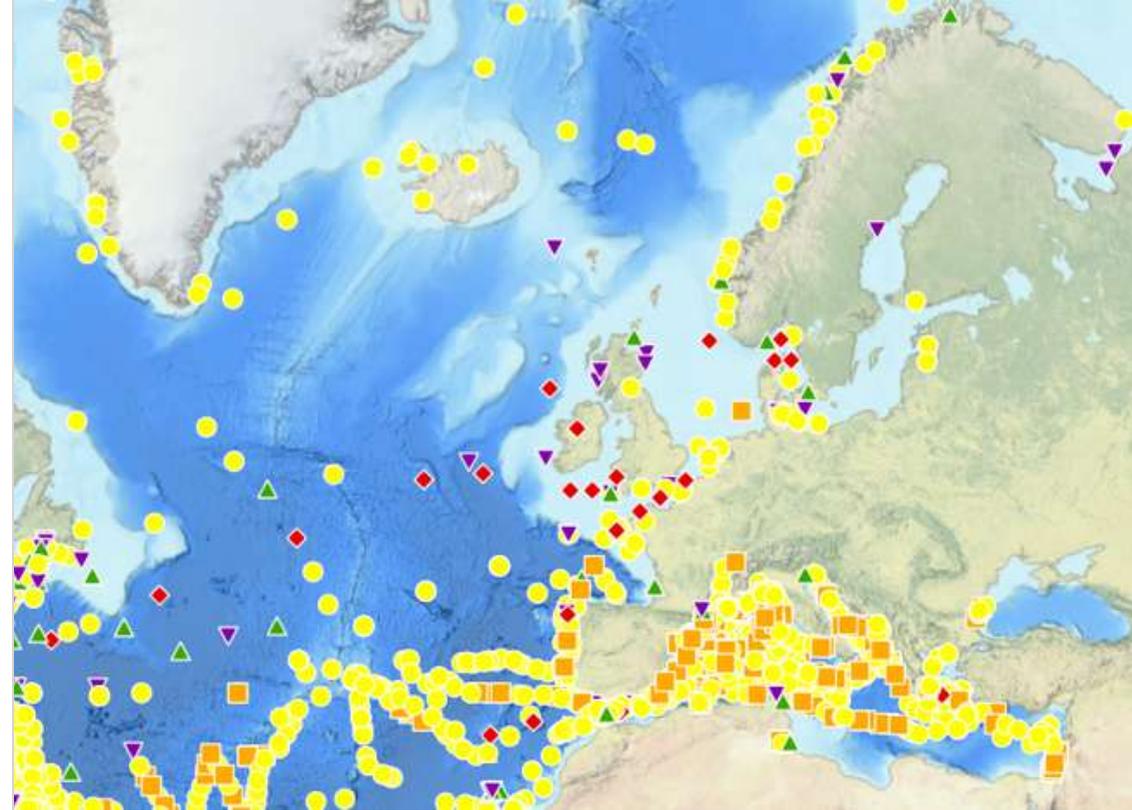


Figure 1 :  
**Microplastic Concentration in European Seas** – National Oceanic and Atmospheric Administration (NOAA)<sup>8</sup>

### Légende

- ◆ Very High: 10 pieces/m<sup>3</sup> or Greater
- High: 1-10 pieces/m<sup>3</sup>
- Medium: 0.005-1 pieces/m<sup>3</sup>
- ▲ Low: 0.0005-0.005 pieces/m<sup>3</sup>
- ▼ Very Low: 0.0005 pieces/m<sup>3</sup> or Less

Today we can act by reducing our production and consumption of plastic, particularly single-use plastic. We can also help to clean up the oceans by recovering floating macroplastics before they degrade and become invisible to the naked eye.

**As boaters,  
you can help us!**



## 2. SAIL FOR OCEAN CONSERVATION

### 2.1 What kind of responsible boater are you?

#### 1) When you navigate, are you more of:

-  An ocean explorer, concerned about the environment.
-  A thrill-seeker, aiming to break records!
-  A curious boater, eager to discover new spots.

#### 2) Which type of vessel do you prefer?

-  A sailing boat, to enjoy wind-powered travel.
-  A jet ski, for the thrill.
-  A motorboat, for its comfort and speed.

#### 3) What does the ocean mean to you?

-  It's a space to preserve.
-  It's a playground.
-  It's a landscape to admire.

#### 4) What are the first questions you ask yourself before going to sea?

-  Have I considered my waste production and onboard recycling?
-  Did I bring my snorkelling gear to explore the underwater world?
-  Did I pack my best swimsuit and sunscreen?

#### 5) As a boater, how can you be more environmentally friendly?

-  I could implement waste sorting onboard and prioritize packaging-free products.
-  I could provide ashtrays for smokers on board.
-  Nothing, I'm here to enjoy my vacation.

### Results:

Do you have more  ,  ,  ?

-  You appear to be an eco-conscious boater. You care about the environment, are aware of the impacts of pollution, and have a genuine desire to preserve the ocean and its biodiversity. You try to incorporate best practice for the environment into your daily habits.
-  You love the ocean... However, there is still room for improvement. Before setting off, consider reading this guide and sharing it with others! If you want to learn even more about sailing and preserving the environment, check out some existing initiatives like [EnviroNaut's](#) online training.
-  Ouch ... Preserving the environment and the Ocean doesn't seem to be your priority. Don't worry, we can take it step by step. Every action counts and you can prevent the Ocean from deteriorating any further while you're out sailing.

## 2.2 Taking action before setting off

Responsible boating requires preparation! Here are some recommendations to consider before heading out to sea.

### LIMIT PACKAGING



- Choose products without packaging and buy kitchen or bathroom supplies in bulk.
- Remove plastic packaging from your products beforehand to avoid the need for waste sorting and storing onboard.
- Avoid single-use items like plastic cups, cutlery, plates or paper napkins.
- Opt for reusable items made of glass, metal or fabric.
- Bring water bottles and jerrycans that you can refill with drinkable water during your stops.
- Choose large water containers instead of individual plastic bottles if you're going on a longer trip, or install a tank and use activated carbon to filter the water.



### PROVIDE ONBOARD RECYCLING BINS



- Install three separate recycling bins on your boat (one for cardboard and paper, one for plastic and metal, and one for glass). Remember to dispose of these waste items in the appropriate recycling bins when you return to port, if containers are available.
- Provide a closed bucket for organic waste that can be used to make compost. We advise you not to throw your organic waste overboard (it is forbidden to dispose of it before 12 miles off the coast).
- If there are smokers on board, provide a closed ashtray for cigarette butts. A cigarette butt pollutes 500L of water.

### CONSIDER NATURAL CLEANING AND COSMETIC PRODUCTS



- Equip yourself with personal care products (soaps, shampoos, sunscreens, etc.) that are as natural and biodegradable as possible.
- Opt for natural cleaning products for household chores and boat cleaning (vinegar, Marseille soap, black soap, baking soda...).
- Choose hull paints (antifouling) that are free from biocides and heavy metals.

## 2.3 Being responsible at sea

### WHAT NOT TO DO ONBOARD ❌

When you're out at sea, act responsibly to avoid plastic leakage and any harm to the ocean.



As captain, set an example for your crew! **Make them aware of what to do onboard.**

**Do not discharge chemical cleaning products into water.**



**Don't spill fuel.** If you detect a leak, try to plug it and bail it out to limit its dispersion in the water.



**Store leftover food in a closed bucket.**

Many fruits and vegetables are chemically treated and can contaminate water and marine animals if thrown overboard!

**Don't throw your garbage in the water,** store it on the boat, and plan to sort it.



**Keep your cigarette butts onboard.** A single cigarette butt can contaminate up to 500 liters of water!



**Be careful with your diving equipment.**



## SHOULD FLOATING DEBRIS BE COLLECTED?



If you come across floating debris and want to help out by collecting it, then go ahead! But before you do, it's important to remember that not all surface debris can be collected, brought on board, and then taken back to port. Indeed, manoeuvring your boat to reach this waste can be technical, time-consuming, and dangerous depending on the area, weather and type of waste. Some waste may be toxic, sharp or too large to store onboard.

If the waste seems light, accessible by hand (or with a landing net) and easy to store, you can bring it back on board.



**If you spot an oil slick, do not intervene. Instead, advise the relevant authorities and then move away from the area to avoid further contamination.**



## YOUR OBSERVATIONS MATTER!



If you spend time at sea, you can help collect data on floating plastic debris in the ocean. There are apps available that allow you to record the debris you encounter during your journey.

Simply sign up, specify the type of waste, quantity and location, then send a photo. This data helps us to understand how and where debris (especially plastics) accumulate at sea.

Some good apps to use are [Ocean Cleanup](#) and [I Clean My Sea](#).



## 2.4 Taking action on land

### OPTIMIZE WASTE SORTING AT PORT



When returning to port, you can put the sorted waste into the appropriate bins, but they must be available. Thankfully, there's an easy way to check. In Europe, a law came into effect in 2019 to improve the disposal of all types of waste in ports. Today, EU Member State ports must have a **ship waste management plan for better environmental compliance**.<sup>9</sup> However, small non-commercial ports, with rare or limited traffic consisting only of pleasure boats, may be exempt from this obligation as this falls under the responsibility of the municipality.<sup>9</sup>

This directive was implemented in line with the MARPOL Convention (the International Convention for the Prevention of Pollution from Ships), which aims to regulate ships to reduce their pollution.

Certain ports in France, for example, have implemented a management policy to encourage the sorting, recycling and recovery of waste, such as in the ports of La Rochelle or Saint-Tropez. The objective? Improve the availability and use of port waste management facilities. Remember to bear this directive in mind and check the port facilities before you set off.

### Labels for clean ports

There are also several programs that allow ports to carry out an environmental diagnosis, certify their waste and pollution management facilities and raise awareness of good practice. Some good examples are the [Clean Marina Program](#), [Ports Propres](#) and [Blue Flag](#).



### SUPPORT CITIZEN SCIENCE



You can join citizen science programmes! They involve people – any people – observing and collecting data in collaboration with the scientists who define protocols and analysis methods.

As a boater, you can participate in numerous programs related to **the location and characterization of marine debris or the observation of marine biodiversity**. In addition to providing valuable data for researchers to better understand the impacts of pollution, volunteer science is a powerful tool for raising awareness.

For example, the **MerTerre** association (which contributes to the reduction of waste in aquatic environments) created the “[Zero Wild Waste](#)” platform in partnership with the National Museum of Natural History and the French Ministry of Ecological Transition - this brought together a set of data on litter and helped the fight against it.

**BECOME  
AN OCEAN  
AMBASSADOR**



**TAKE ACTION!**

Join The SeaCleaners and European Boating Industry (EBI) in their fight to protect the Ocean.

**TRAIN YOURSELF:**

In partnership with the EBI, the Erasmus+ EnviroNaut project is developing the first program to train nautical tourism professionals in environmental preservation. This training, which is online and therefore easily accessible, aims to help the sector transition to more environmentally friendly practices.



**SUPPORT US**

Furthermore, The SeaCleaners teams actively fight against plastic pollution in France and around the world by advancing scientific knowledge, developing innovative marine waste collection vessels (e.g. the MANTA and MOBULAS) and raising people's awareness of ocean preservation. We organize numerous cleaning initiatives on land and at sea, develop educational kits, posters and videos, as well as cleaning guides for use on land, underwater and on the water to mobilize as many people as possible against ocean pollution.

Discover our tools on [theseacleaners.org](https://theseacleaners.org)!

**Take action to  
combat plastic  
pollution!**

# CONTACTS



European Boating Industry



The SeaCleaners

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