

From *marine strategy* to active citizenship: Guidelines to beach litter's sampling

Objective

Beach litter's data allows us to get preliminary information for the study of the beached garbage phenomenon, and particularly focusing on quantity, trend and possible sources, **in relation with the new European Directive about *Marine Strategy***.

The information that we will obtain through these samples, in the framework of "*Spiagge e Fondali Puliti* – Clean-up the Med ", will be useful to survey the amount of trash thrown into the marine environment and also to test the sampling protocol, here described in brief. The protocol is the same as the one proposed by the Italian Environmental Ministry, wherewith we are working at optimizing it and make it more operational for the competent institutions, starting from our organization experience.

Taking into account the data's elaboration period on a national level, the results have to be communicated within the 16th of May!

1. Criteria to identify the investigation areas

- 1.1** Investigation area has got to be a "**free**" beach, therefore not subject to periodic garbage collection; furthermore the beach **must not have been cleaned** during the winter season.
- 1.2** Although sampling is easier on sandy beaches, also pebbly, gravelly and rock ones can be included in the evaluation program.
- 1.3** The beach should possibly be **close to estuaries, holes, etc.** in order to estimate the amount of trashes coming from the rivers, besides the ones from the sea.
- 1.4** Choosing beaches that are more **subject to litter accumulation**, i.e. due to the presence of currents, promontories, winds, etc...
- 1.5** The investigation area's **minimum length** must be **100 meters**, the same for all the beaches analyzed.

Once the referring beaches have been chosen, the specific investigation areas must be identified. **IMPORTANT: Investigation areas must be 100 meters long and must cover the entire beach width**, from shore to dunes, or Vegetation.

(check the picture at point 3). If you have already performed the monitoring in its previous editions, please repeat it in the same portion of beach, so that we can study the evolution of plastic pollution throughout the years.

2. How to do the sampling

- 2.1** Fill the **BEACH IDENTIFICATION FORM** that you find attached, with all the information required (point 4).
- 2.2** The sampling has got to be done walking through the beach methodically, orthogonally from the coast line, along **2 meters distance paths** (see the picture at point 3), and taking notes on the form of all the found objects.
- 2.3 All the solid trashes standing on the beach surface**, visible on the strand, even partially covered by the sand, must be counted, **EXCLUDING** only the ones that you found digging.

4. BEACH IDENTIFICATION FORM

Organization/School/University/Hotel/Public or private body:

Email:

State, region:

Telephone number:

City		Date	
		Responsible	

Beach name

Investigation area's coordinates (gg,ggg°)

Start		End	
LAT:	LONG:	LAT:	LONG:

Investigation area's effective width (m)

100 m Xwidth

Beach description

Are there urban areas?		Yes	No
City/Town	City	City	
Distance from the investigation areas (km)			
Are there rivers' estuaries or water sewers?		Yes	No
Rivers/sewers name	River	River	
Distance from the investigation areas (km)			
Are there harbours nearby?		Yes	No
Name of the closer harbours	Harvour	Harvour	
Distance from the investigation areas (km)			
Are there industrial sites nearby?		Yes	No
Name of the closer sites	Site	Site	
Distance from the investigation areas (km)			
Are there beach resorts/kiosks nearby?		Yes	No
Is it a bathing beach?		Yes	No
Access to the beach	Vehicles	Yes	No
	Pedestrian	Yes	No
	Only by the sea	Yes	No

Other

Beach type

SILT - SAND – PEBBLES

NOTES (events that can influence the sampling)

i.e wind, rain, etc...

