

From Marine Strategy to the citizen science

Plastic bag, I'm watching you!

This year we want to keep close watch on the plastic bags, as they were the most common item found during the last “Clean up the MED” campaign. In the Mediterranean Sea an estimated 25 million plastic bags pollute every 1,000 km of coast and this material can trap or suffocate sea turtles, birds and marine mammals. Moreover, the economic cost associated to the impacts on marine ecosystems was estimated at a minimum of 8 billion dollars per year considering the revenue loss to fisheries and the marine tourism industries; that is excluding the cost of beach cleaning. These are the reasons why Legambiente is promoting the ban on traditional plastic bags and encouraging the transition to compostable carrier bags which may also improve the separate collection of food waste. Around the Mediterranean Sea only Italy, Morocco, Spain and France have taken measures in this direction: for example in Italy, since 2011, plastic bags has been reduced by 55% whereas the CO2 the reduction has acquired more than 900.000 CO2 tons.

Therefore we invite you to pay particular attention to the plastic bags' survey; every single plastic bag must be counted so to monitor their environmental dispersion. You must also take notice of the hot spots. Every fragment or piece which may be connected to a specific object must be considered as a full item (e.g.: a piece of glass bottle must be catalogued as a full glass bottle).

We hope that all the participating associations to this year's “Clean up the MED” campaign will endorse the plastic bags' banning manifesto that was promoted in every country all over the Mediterranean sea. You can join the appeal filling the form at the following link:

<http://international.legambiente.it/uncategorized/stop-plastic-bags-in-the-mediterranean-area/>

Reminder

1. The investigation area must be a **“free” beach**, that is not subject to periodic garbage collection; furthermore, the beach must not have been cleaned during the winter season.
2. The beach should possibly be **close to estuaries, holes, etc.** so that you may estimate the amount of trash coming from the rivers, other than the garbage coming from the sea.
3. Choose beaches more **subject to litter accumulation** due to the presence of currents, promontories, winds, etc....
4. The investigation area must be **100 meters long** (you will need GPS), same length for every beach which we're going to analyse, and cover the entire beach width, from shore to dunes, or vegetation.



5. Walk through the sampling area taking note on the shape of every object found (you may use our table set at the last four pages of this document). You may take note of the trash *after* the beach cleaning. However, removal of the litter should be carried out at the same time as the litter monitor.
6. Every solid refuse found on the beach surface, if visible on the strand, must be counted; even if partially covered by the sand.
7. For the trash recording, use the sampling categories following the right codes.

Size limit

There are no upper size limits to litter recorded on beaches.

A lower limit of 2,5 cm is recommended for litter items monitored during beach surveys. This would ensure the inclusion of caps & lids and cigarette butts in any counts.

NB

Fragments or pieces which you can connect to specific objects must be consider as the full item (e.g.: a piece of a glass bottle must be catalogued as a glass bottle).

After the sampling, follow the instructions and fill in the form which you may find in [the excel file](#), then send it to scientifico@legambiente.it by the end of April 2017

Follow the instructions below to fill in the excel file.

Firstly, download and open the excel file. Then...

The image shows a screenshot of an Excel spreadsheet with the following data:

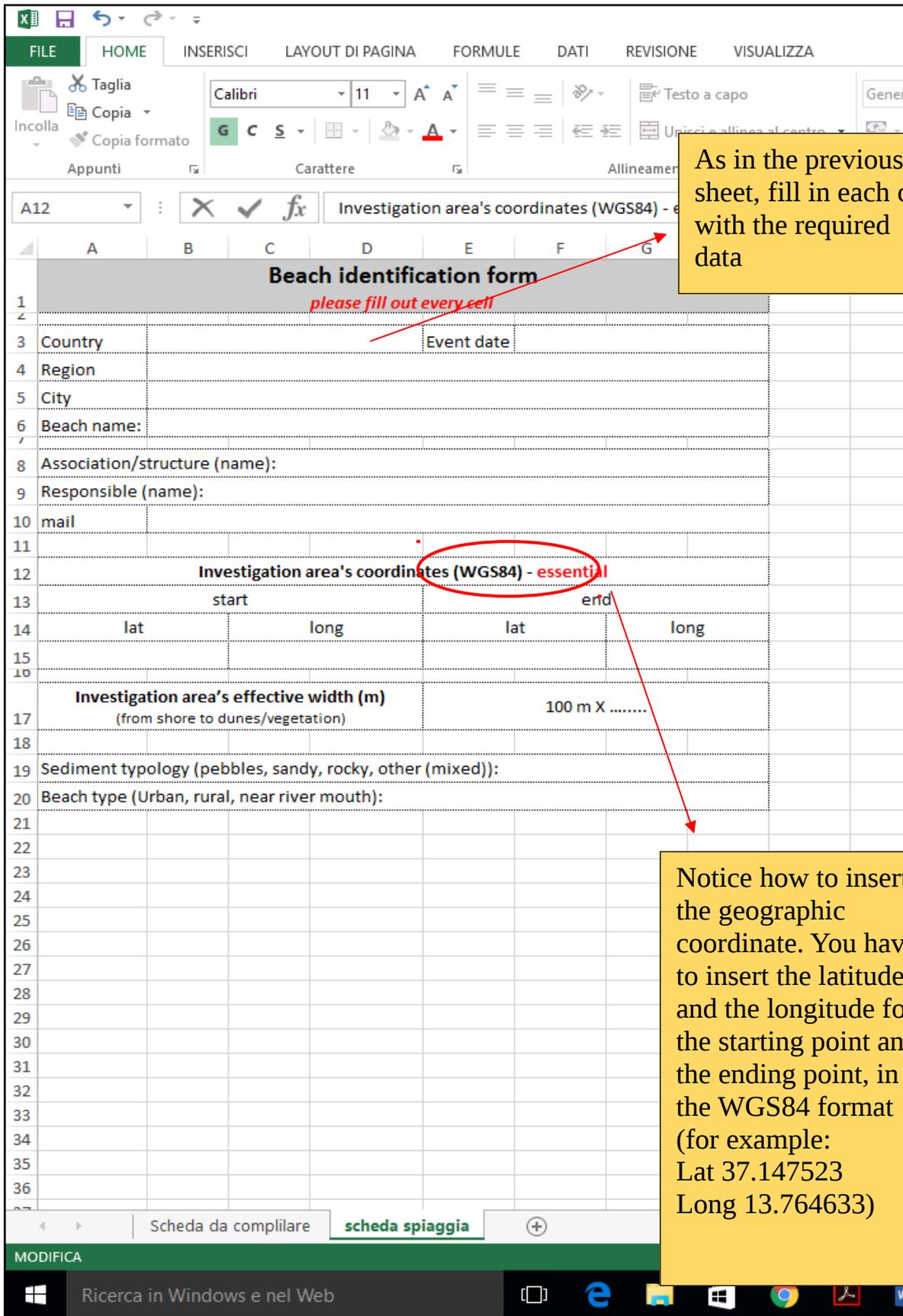
Materials / objects	TSG ML code	Total number of objects
Plastic		
4/6-pack yokes, six-pack rings	G1	
Shopping Bags incl. pieces	G3	
Small plastic bags, e.g. freezer bags incl. Pieces	G4	
Plastic bags collective role; what remains from rip-off plastic bags	G5	
Drink bottles <= 0.5l	G7	
Drink bottles > 0.5l	G8	
Cleaner bottles & containers	G9	
Food containers incl. fast food containers	G10	
Beach use related cosmetic bottles and containers, eg. Sunblocks	G11	
Other cosmetics bottles & containers	G12	
Other bottles & containers (drums)	G13	
Engine oil bottles & containers <50 cm	G14	
Engine oil bottles & containers > 50 cm	G15	
Jerry cans (square plastic containers with handle)	G16	
Injection gun containers	G17	
Crates and containers / baskets	G18	
Car parts	G19	
Plastic caps/lids drinks	G21	
Plastic caps/lids chemicals, detergents (non-food)	G22	
Plastic caps/lids unidentified	G23	
Plastic rings from bottle caps/lids	G24	
Tobacco pouches / plastic cigarette box packaging	G25	
Cigarette lighters	G26	
Cigarette butts and filters	G27	
Pens and pen lids	G28	
Combs/hair brushes/sunglasses	G29	
Crisps packets/sweets wrappers	G30	
Lolly sticks	G31	
Toys and party poppers	G32	
Cups and cup lids	G33	
Cutlery and trays	G34	
Straws and stirrers	G35	
Fertiliser/animal feed bags	G36	
Mesh vegetable bags	G37	

Callout boxes provide the following instructions:

- Click here to insert the number of items you have found on the beach
- Insert 0 if no item was found

Keep in mind that the file is made up of two sheets and you have to fill in both of them

The spreadsheet has two sheets: "Scheda da compilare" (circled in red) and "scheda spiaggia".



As in the previous sheet, fill in each cell with the required data

Notice how to insert the geographic coordinate. You have to insert the latitude and the longitude for the starting point and the ending point, in the WGS84 format (for example:
Lat 37.147523
Long 13.764633)

Print and use the following table during the survey:

Materials / objects	TSG_M L code	Total number of objects
Plastic		
4/6-pack yokes, six-pack rings	G1	
Shopping Bags incl. pieces	G3	
Small plastic bags, e.g. freezer bags incl. Pieces	G4	
Plastic bags collective role; what remains from rip-off plastic bags	G5	
Drink bottles <= 0.5l	G7	
Drink bottles > 0.5l	G8	
Cleaner bottles & containers	G9	
Food containers incl. fast food containers	G10	
Beach use related cosmetic bottles and containers, eg. Sunblocks	G11	
Other cosmetics bottles & containers	G12	
Other bottles & containers (drums)	G13	
Engine oil bottles & containers <50 cm	G14	
Engine oil bottles & containers > 50 cm	G15	
Jerry cans (square plastic containers with handle)	G16	
Injection gun containers	G17	
Crates and containers / baskets	G18	
Car parts	G19	
Plastic caps/lids drinks	G21	
Plastic caps/lids chemicals, detergents (non-food)	G22	
Plastic caps/lids unidentified	G23	
Plastic rings from bottle caps/lids	G24	
Tobacco pouches / plastic cigarette box packaging	G25	
Cigarette lighters	G26	
Cigarette butts and filters	G27	
Pens and pen lids	G28	
Combs/hair brushes/sunglasses	G29	
Crisps packets/sweets wrappers	G30	
Lolly sticks	G31	
Toys and party poppers	G32	
Cups and cup lids	G33	
Cutlery and trays	G34	
Straws and stirrers	G35	
Fertiliser/animal feed bags	G36	
Mesh vegetable bags	G37	
Gloves (washing up)	G40	
Gloves (industrial/professional rubber gloves)	G41	
Crab/lobster pots and tops	G42	
Tags (fishing and industry)	G43	
Octopus pots (plastic)	G44	
Mussels nets, Oyster nets	G45	

Oyster trays (round from oyster cultures)	G46	
Plastic sheeting from mussel culture (Tahitians)	G47	
Rope (diameter more than 1cm)	G49	
String and cord (diameter less than 1cm)	G50	
Nets and pieces of net	G52	
Nets and pieces of net < 50 cm	G53	
Nets and pieces of net > 50 cm	G54	
Tangled nets/cord	G56	
Fish boxes - plastic	G57	
Fish boxes - expanded polystyrene	G58	
Fishing line/monofilament (angling)	G59	
Light sticks (tubes with fluid) incl. packaging	G60	
Floats for fishing nets	G62	
Buoys	G63	
Fenders	G64	
Buckets	G65	
Strapping bands	G66	
Sheets, industrial packaging, plastic sheeting	G67	
Fibre glass/fragments	G68	
Hard hats/Helmets	G69	
Shotgun cartridges	G70	
Shoes/sandals	G71	
Traffic cones	G72	
Foam sponge	G73	
Plastic/polystyrene pieces 2.5 cm > < 50cm	G76	
Plastic/polystyrene pieces > 50 cm	G77	
Plastic pieces 2.5 > < 50 cm	G79	
Plastic pieces > 50 cm	G80	
Polystyrene pieces 2.5 cm > < 50 cm	G82	
Polystyrene pieces > 50 cm	G83	
CD, CD-box	G84	
Salt packaging	G85	
Fin trees (from fins for scuba diving)	G86	
Masking tape	G87	
Telephone (incl. parts)	G88	
Plastic construction waste	G89	
Plastic flower pots	G90	
Biomass holder from sewage treatment plants	G91	
Bait containers/packaging	G92	
Cable ties	G93	
Cotton bud sticks	G95	
Sanitary towels/panty liners/backing strips	G96	
Toilet fresheners	G97	
Diapers/nappies	G98	
Syringes/needles	G99	
Medical/Pharmaceuticals containers/tubes	G100	
Dog feces bag	G101	

Flip-flops	G102	
Other plastic/polystyrene items (identifiable)	G124	
Rubber		
Balloons and balloon sticks	G125	
Balls	G126	
Rubber boots	G127	
Tyres and belts	G128	
Inner-tubes and rubber sheet	G129	
Wheels	G130	
Rubber bands (small, for kitchen/household/post use)	G131	
Bobbins (fishing)	G132	
Condoms (incl. packaging)	G133	
Other rubber pieces	G134	
Cloth/Textile		
Clothing / rags (clothing, hats, towels)	G137	
Shoes and sandals (e.g. Leather, cloth)	G138	
Backpacks & bags	G139	
Sacking (hessian)	G140	
Carpet & Furnishing	G141	
Rope, string and nets	G142	
Sails, canvas	G143	
Tampons and tampon applicators	G144	
Other textiles (incl. rags)	G145	
Paper/Cardboard		
Paper bags	G147	
Cardboard (boxes & fragments)	G148	
Cartons/Tetrapack Milk	G150	
Cartons/Tetrapack (others)	G151	
Cigarette packets	G152	
Cups, food trays, food wrappers, drink containers	G153	
Newspapers & magazines	G154	
Tubes for fireworks	G155	
Paper fragments	G156	
Other paper items	G158	
Wood (processed/worked)		
Corks	G159	
Pallets	G160	
Processed timber	G161	
Crates	G162	
Crab/lobster pots	G163	
Fish boxes	G164	
Ice-cream sticks, chip forks, chopsticks & toothpicks	G165	
Paint brushes	G166	
Matches and fireworks	G167	
Other wood < 50cm	G171	
Other wood > 50 cm	G172	

Metal		
Aerosol/Spray cans industry	G174	
Cans (beverage)	G175	
Cans (food)	G176	
Foil wrappers, aluminum foil	G177	
Bottle caps, lids & pull tabs	G178	
Disposable BBQ's	G179	
Appliances (refrigerators, washers, etc.)	G180	
Tableware (plates, cups and cutlery)	G181	
Fishing related (weights, sinkers, lures,	G182	
Lobster/crab pots	G184	
Industrial scrap	G186	
Drums, e.g. oil	G187	
Other cans (< 4 L)	G188	
Gas bottles, drums & buckets (> 4 L)	G189	
Pint tins	G190	
Wire, wire mesh, barbed wire	G191	
Car parts / batteries	G193	
Cables	G194	
Household batteries	G195	
Other metal pieces < 50 cm	G198	
Other metal pieces > 50 cm	G199	
Glass		
Bottles incl. pieces	G200	
Jars incl. pieces	G201	
Light bulbs	G202	
Tableware (plates & cups)	G203	
Construction material (brick, cement, pipes)	G204	
Fluorescent light tubes	G205	
Glass buoys	G206	
Octopus pots	G207	
Glass or ceramic fragments > 2,5cm	G208	
Other glass items	G210	
Chemicals		
Other medical items (swabs, bandaging, adhesive plaster, etc.)	G211	
Unidentified		
Paraffin/Wax	G213	