

FROM PILOT MONITORING ACTIONS TO PARTICIPATORY SCIENCE ON MARINE LITTER: THE EU SWIM H2020 SM, WES & OTHER MEDITERRANEAN SHOWCASES

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TETHYS4ADRION Leader of the 'Riverine Plastic Litter Prevention & Restoration Actions'



WES - BCA

**Regional Webinar on the Mediterranean monitoring and reporting programs for
marine litter prevention and mitigation**

MEDITERRANEAN SHOWCASES



PLASTIC BUSTERS MPAs



Plastic Busters CAP



ACT4LITTER



Water and Environment Support
in the ENI Southern Neighbourhood region



Funded by the European Union



DeFishGear
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Marine litter
monitoring pilots
CI22, CI23, CI24

Participatory science
CI22, CI23



PAVING THE WAY FOR A COMPREHENSIVE MONITORING & DIAGNOSIS OF THE ML PROBLEM IN THE MEDITERRANEAN

Beach

Sea
surface

Seafloor

Biota

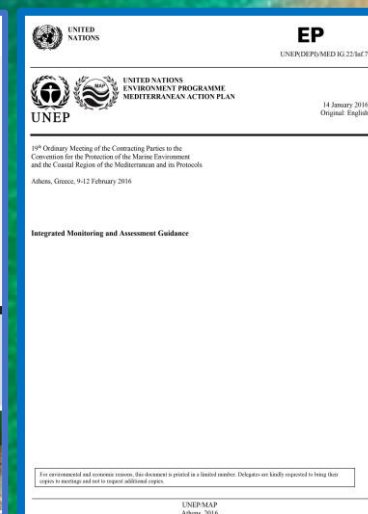
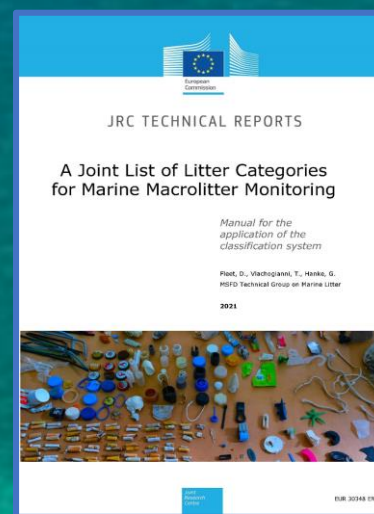
MACROLITTER
ITEMS > 2.5 CM

MICROLITTER
ITEMS < 0.5 CM

Fit-for-
purpose
data

Comparable
data

Reliable
data



ASSESSING MARINE LITTER ON THE ALGERIAN COASTLINE – SWIM-H2020 SM BEACH LITTER DATA



Vlachogianni, Th., Scoullos, M., 2024. Baseline assessment of macrolitter on the coastline of Algeria: fit-for-purpose data for tailor-made measures to navigate the Plasticene Age. *Marine Pollution Bulletin*, 205, 116646.

ASSESSING MARINE LITTER ON THE ALGERIAN COASTLINE – SWIM-H2020

SM BEACH LITTER DATA – LITTER DENSITY

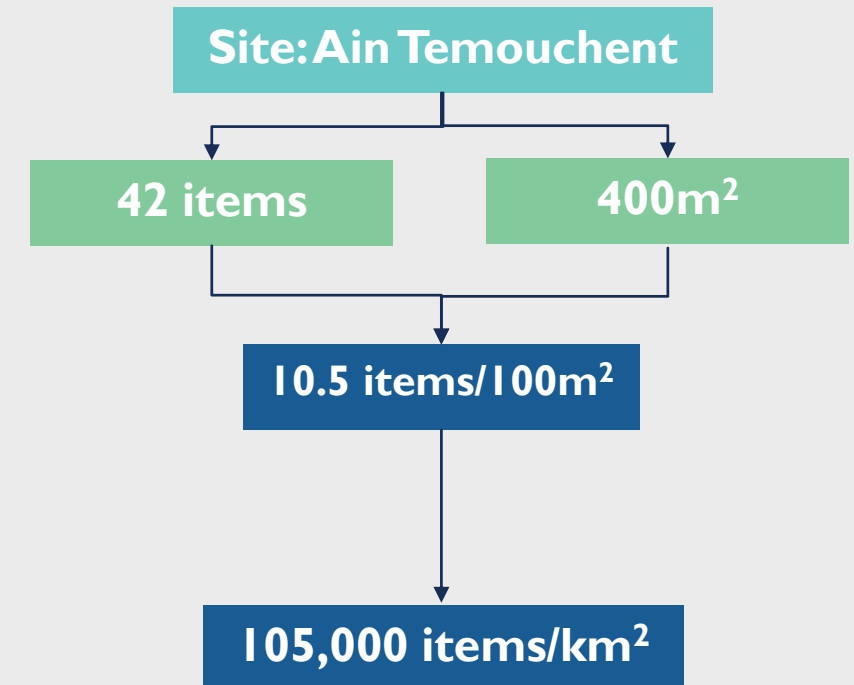
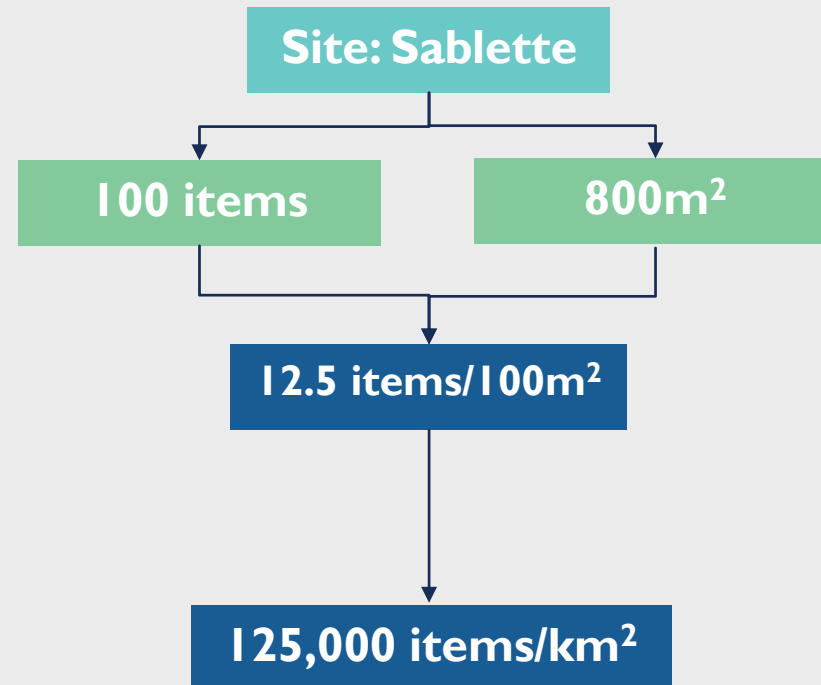
Site Code	Site Name	Province	Litter Density per 100m	(E) LCR	(M) LCR
BS7	Sghiret	Boumerdes	2684	134	21
BS6	ElAzrek	Boumerdes	1556	78	12
BS4	Khaloufi II	Algiers	1223	61	9
BS1	Agla	Tlemcen	1217	61	9
BS15	Djenen El Bey	Annaba	1069	53	8
BS2	Les Andalouses	Oran	740	37	6
BS5	Deca	Algiers	728	36	6
BS14	Sable d'Or	Annaba	685	34	5
BS13	Kef Fatma	Skikda	680	34	5
BS17	Messida	El Taref	632	32	5
BS10	Grand Phare	Jijel	587	29	5
BS16	Laouinette	El Taref	578	29	4
BS3	Grande – Oran	Oran	545	27	4
BS8	Sidi Khelifa	Tizi Ouzou	447	22	3
BS12	Grande – Skikda	Skikda	341	17	3
BS9	Petit Paradis	Tizi Ouzou	338	17	3
BS11	El M'Zair	Jijel	317	16	2

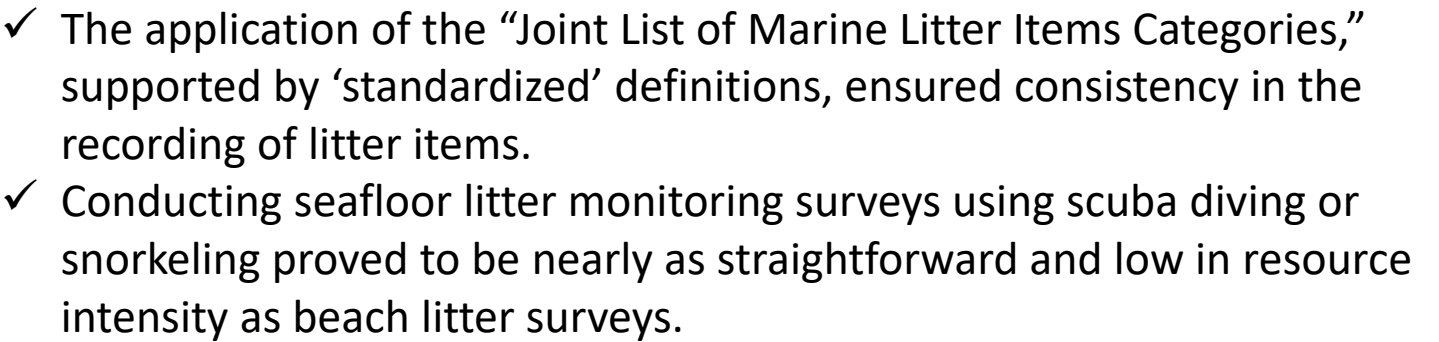
The median litter density documented in this report, amounting to 578 items/100m

ASSESSING MARINE LITTER IN ALGERIA— WES SEAFLOOR LITTER DATA - DENSITY

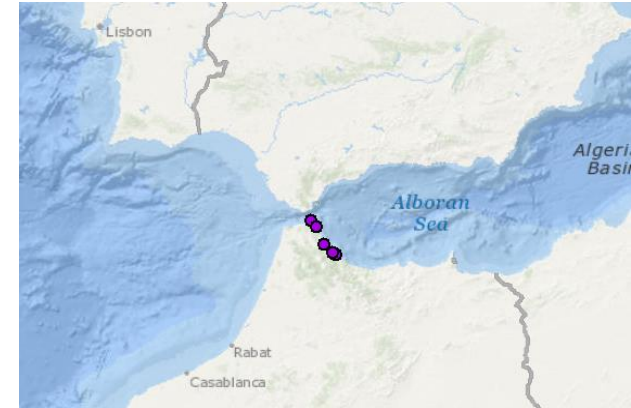


**Water and
Environment Support**
in the ENI Southern Neighbourhood region



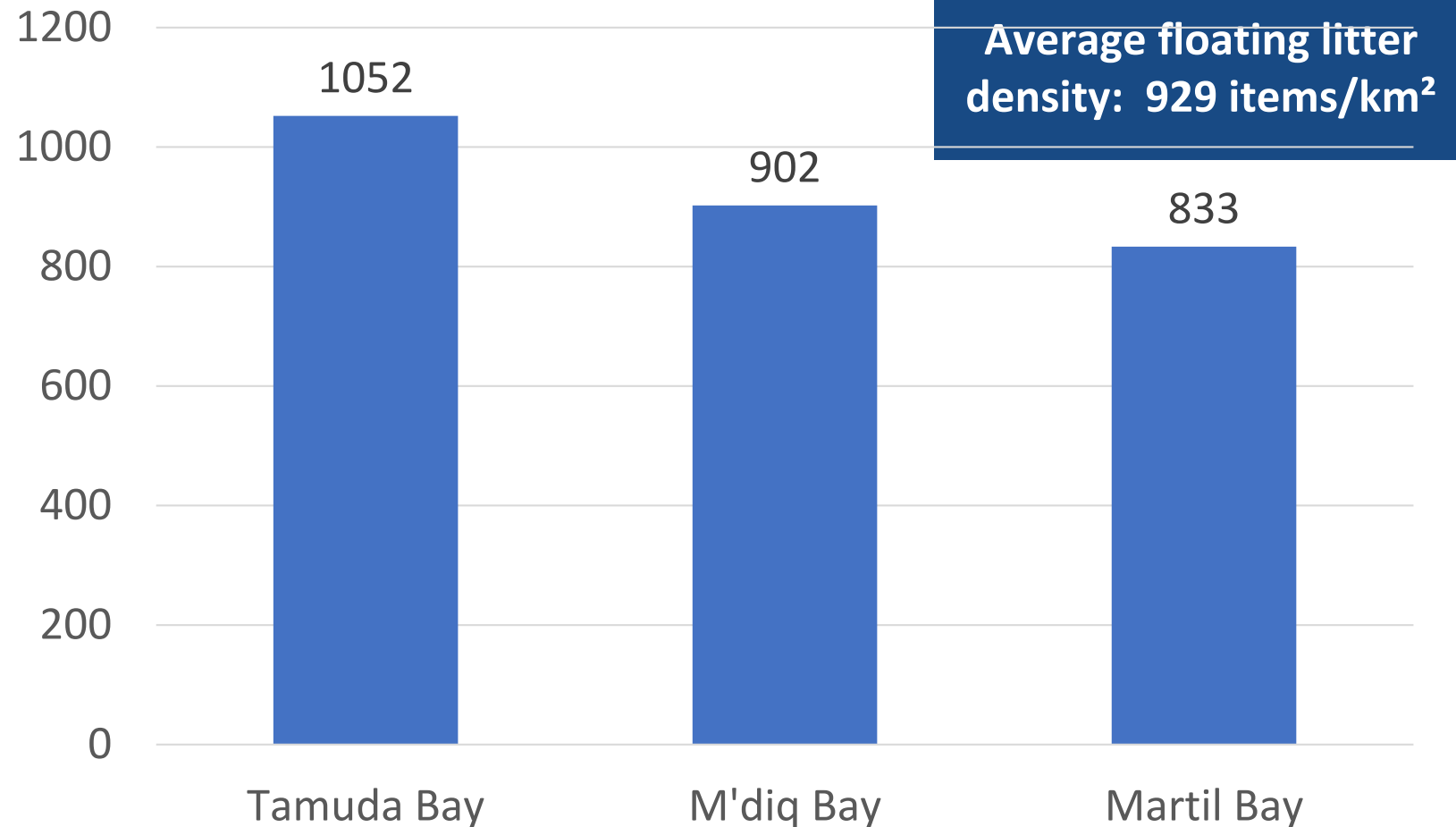


ASSESSING MARINE LITTER IN MOROCCO – SWIM-H2020 SM BEACH LITTER DATA



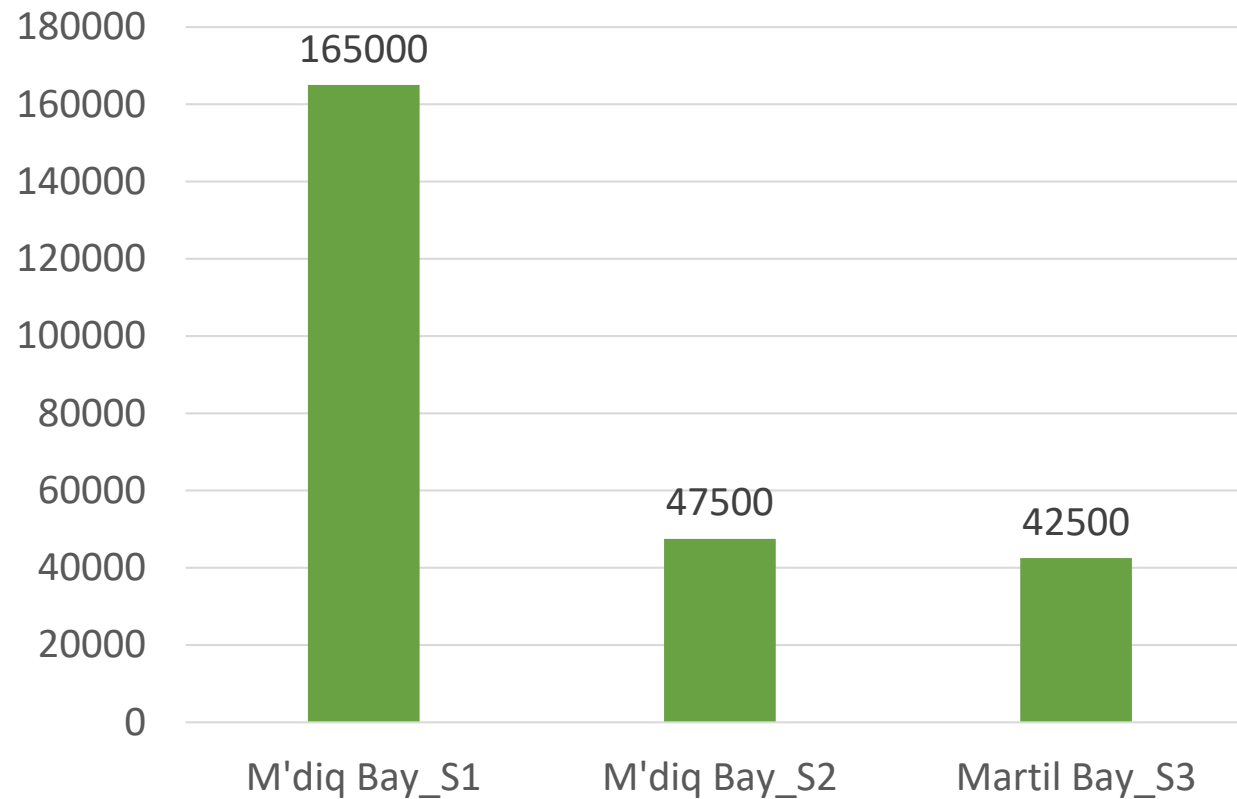
The beach litter surveys were carried out on beaches located in five sites along the Mediterranean coastline of Morocco, namely the sites of Qued El Marsa, Tres Pedras,

ASSESSING MARINE LITTER ON THE MOROCCAN SEA SURFACE – WES SEA SURFACE LITTER DATA



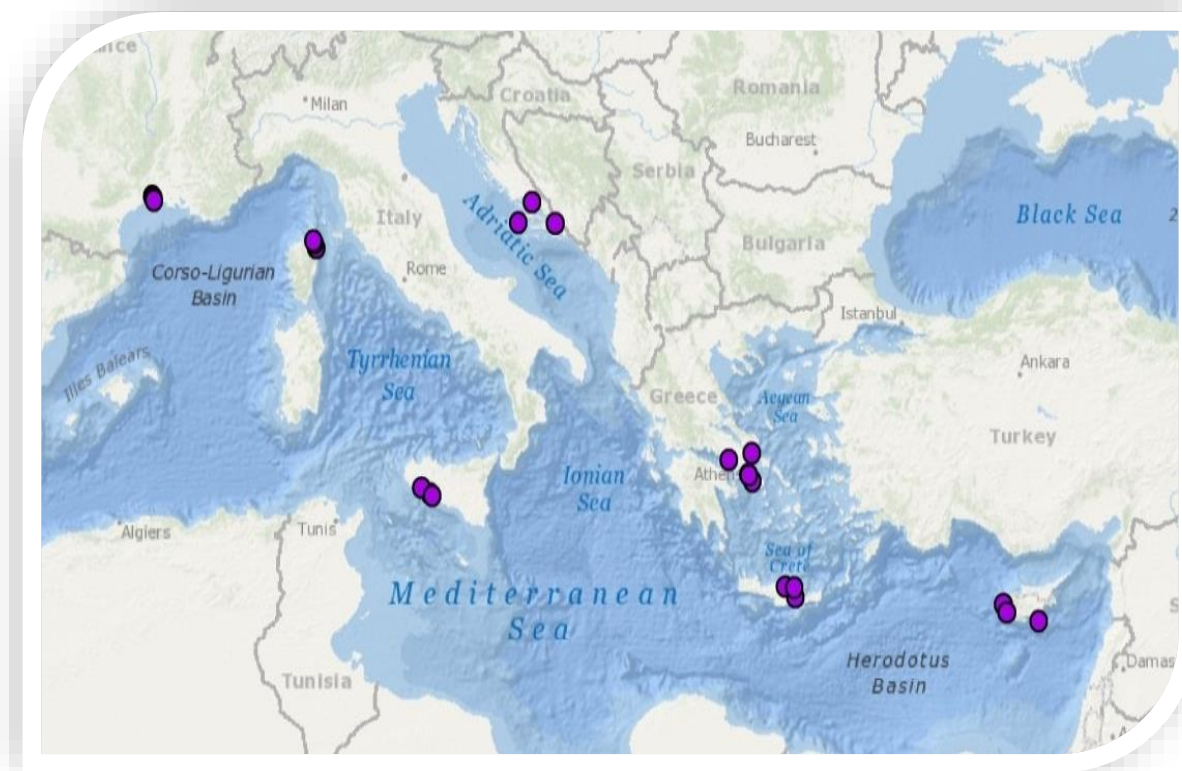
ASSESSING MARINE LITTER ON THE MOROCCAN SEAFLOOR – WES

SEAFLOOR LITTER DATA - DENSITY



Average seafloor litter density: 85,000 items/km²

GENERATING FIT-FOR-PURPOSE MARINE LITTER DATA WITH NGOS

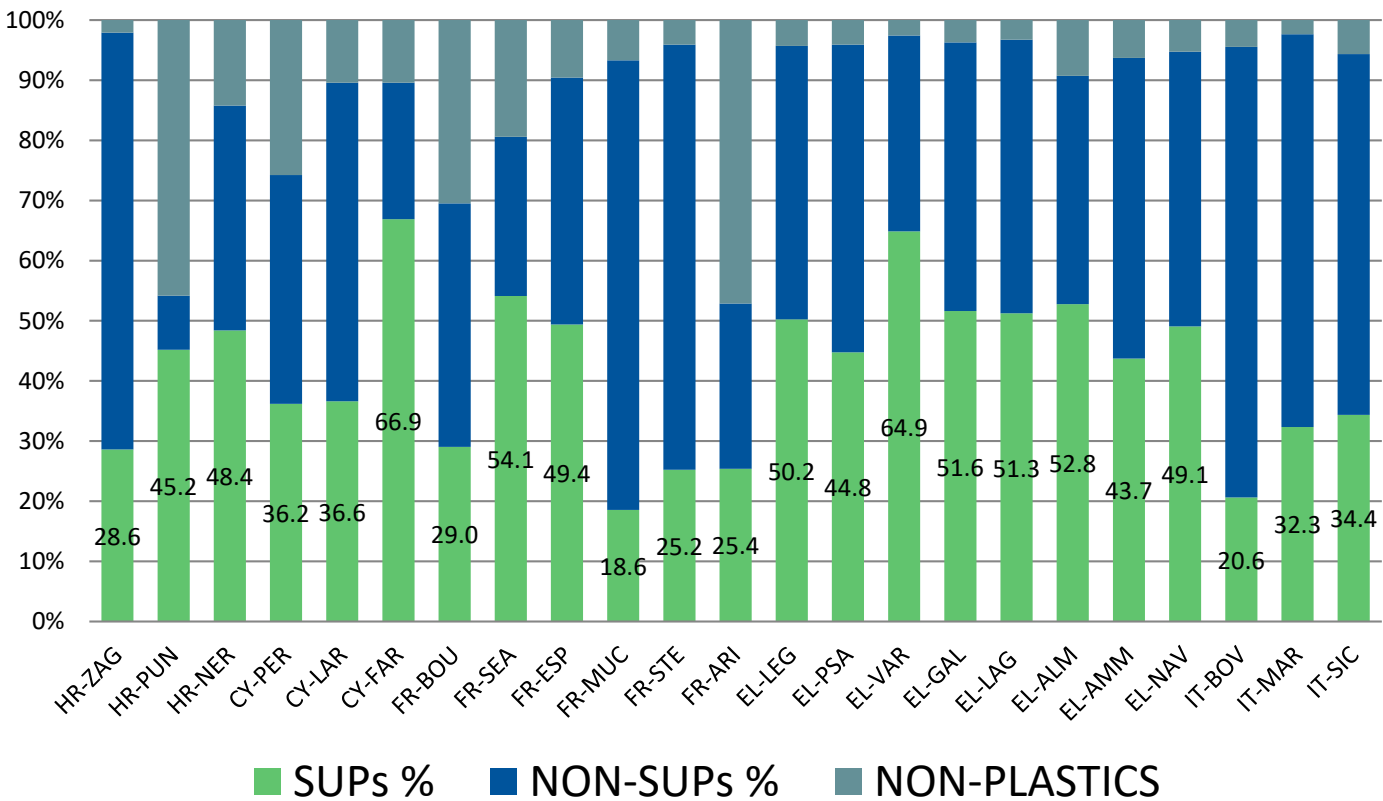
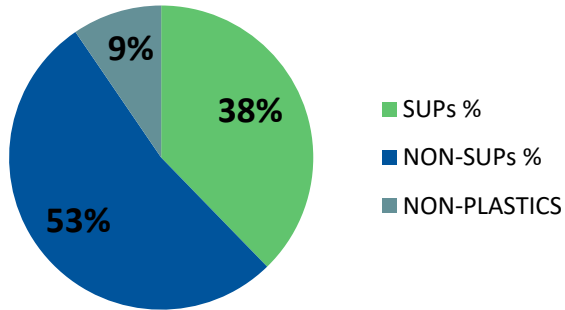


7 environmental NGOs: AKTI PROJECT AND RESEARCH CENTRE (Cyprus), MAREVIVO (Italy), HELMEPA (Greece), MIO-ECSDE (Greece), SEAQUARIUM MARINE INSTITUTE (France), SUNCE (Croatia) and U MARINU (France).

Vlachogianni, Th., Skocir, M., Constantin, P., Labbe, C., Orthodoxou, D., Pesmatzoglou, I., Scannella, D., Spika, M., Zissimopoulos, V., Scoullou, M., 2020. Plastic pollution on the Mediterranean coastline: generating fit-for-purpose data to support decision-making via a participatory-science initiative. *Science of the Total Environment*, 717, 135058.
<https://doi.org/10.1016/j.scitotenv.2019.135058>

Beach litter surveys in 5 Mediterranean countries; a total of **23** sites surveyed; a total of **62** beach transects performed, extending over a distance of 6,200 m and covering an area of 113,780m²

SINGLE-USE PLASTICS



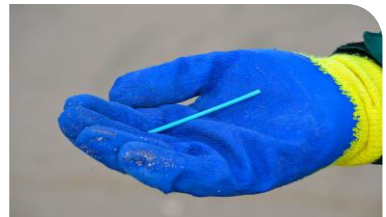
Plastic pieces 2.5 cm > < 50cm (G79)



Cigarette butts and filters (G27)



Plastic caps/lids from drinks (G21)



Cotton bud sticks (G95)



Straws and stirrers (G35)



Glass bottles (G200)

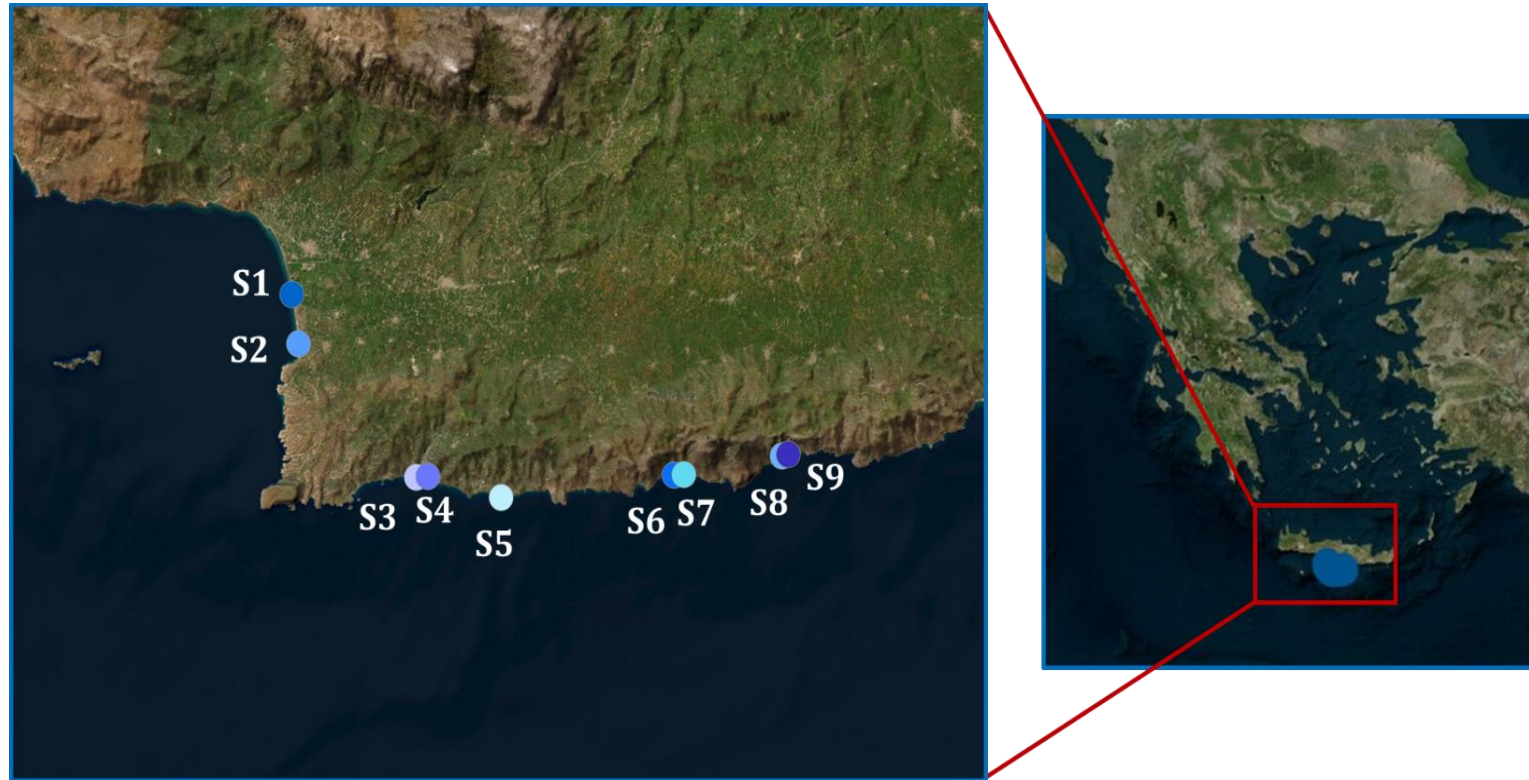


Crisps packets/sweets wrappers (G30)

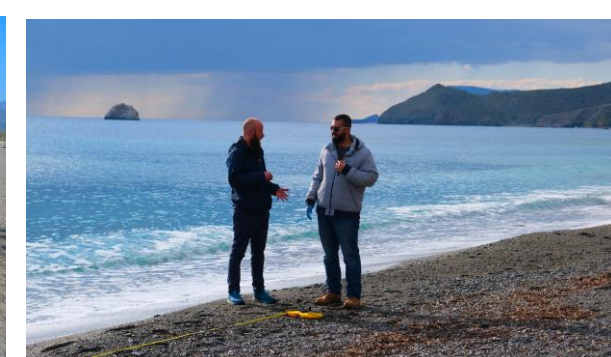


String and cord (diameter less than 1cm) (G50)

COMMUNITY-BASED RESEARCH IN THE ASTEROUSIA BIOSPHERE RESERVE



Vlachogianni, Th., Scoullos, M., 2023. Assessing marine macrolitter on the coastline of the Asterousia Biosphere Reserve: Insights from a community-based study. Marine Pollution Bulletin, 195, 115474. <https://doi.org/10.1016/j.marpolbul.2023.115474>



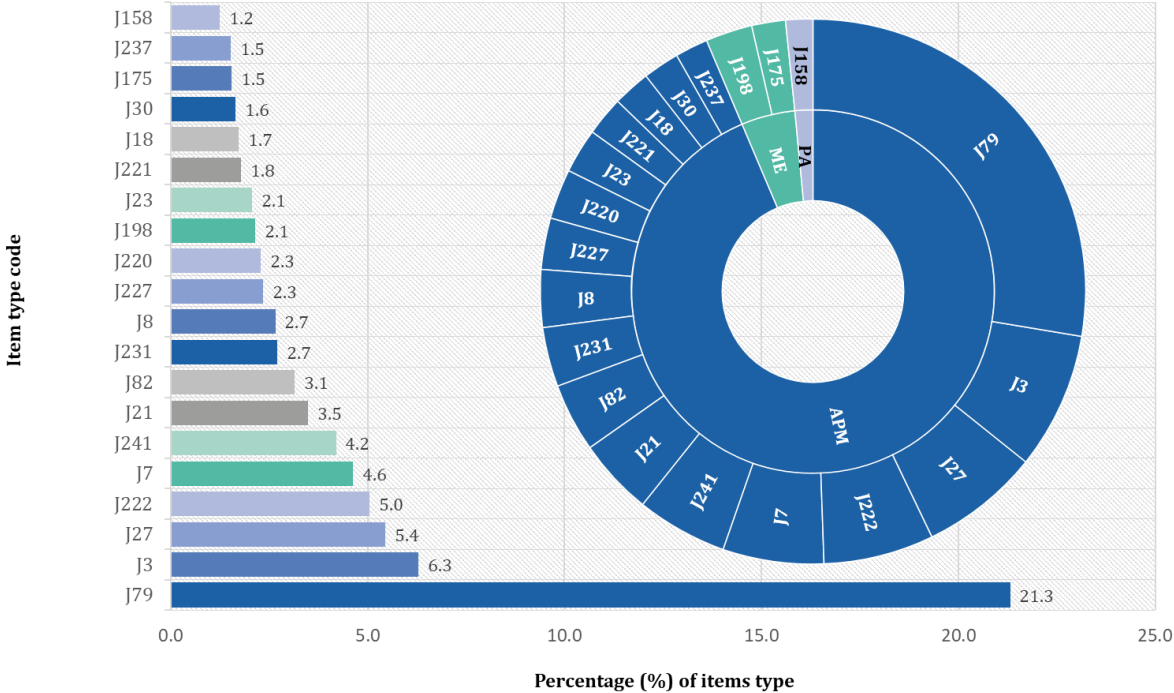
A BIG THANK YOU!!!

Local Management Committee of Asterousia, Heraklion Development Agency, Association for the Protection of Asterousia, Primary School of Petrokefali, Primary School of Pitsidia, First and Second Primary School of Tympaki, Agricultural School of Messara, Association Friends of Tris Ekklisies, Association of Volunteer Firefighters and Environmental Protection of Asterousia, Asterousia Youth Group, Cultural Association Elygia, Cultural Association Kalamaki, Cultural Association Miamou Lentas, Department of Agriculture of the Hellenic Mediterranean University, Educational Development Agency Ploigos, Greek Mountaineering Club of Moires, Regional Centre for Educational Planning of Primary and Secondary Education of Crete.

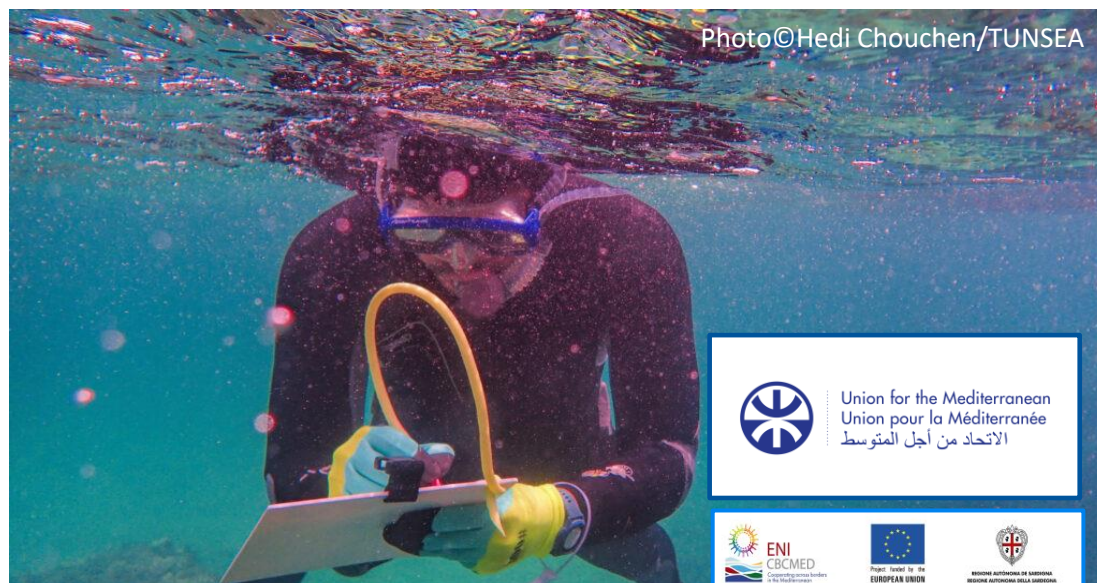
THE RESEARCH RESULTS IN A NUTSHELL

No	Litter density per 100m	Times higher than the EU TV
S1	510	x 26
S9	159	x 8
S2	129	x 6
S3	108	x 5
S6	71	x 4
S4	59	x 3
S7	45	x 2
S5	22	x 1
S8	22	x 1

TOP	CODE	NAME	%
1	J79	fragments of non-foamed plastic 2.5cm ≥ ≤ 50cm	21
2	J3	plastic shopping/carrier/grocery bags	6
3	J27	tobacco products with filters (cigarette butts with filters)	5
4	J222	other plastic items from agriculture	5
5	J7	plastic drink bottles ≤ 0.5 l	5
6	J241	other identifiable non-foamed plastic items	4
7	J21	plastic caps/lids drinks	3
8	J82	fragments of foamed polystyrene 2.5 cm ≥ ≤ 50 cm	3
9	J231	plastic straws	3
10	J8	plastic drink bottles >0.5 l	3



THE PLASTIC BUSTERS CAP PARTICIPATORY SCIENCE CAMPAIGN



Union for the Mediterranean
Union pour la Méditerranée
الاتحاد من أجل المتوسط



Plastic Busters CAP



16 ORGANIZATIONS

AQUAMAR (Algeria)

IOF (Croatia)

SUNCE (Croatia)

UNIVERSITY OF DUBRONVIK (Croatia)

AKTI (Cyprus)

SEAQUARIUM (France)

RESEACLONS (France)

MIO-ECSDE (Greece)

LOCAL MANAGEMENT COMMITTEE OF ASTEROUSIA (Greece)

LEGAMBIENTE (Italy)

MANAGEMENT BODY OF DEBELI RTIČ LANDSCAPE PARK (Slovenia)

MANAGEMENT BODY OF LANDCSAPE PARK STRUNJAN (Slovenia)

INSTITUTE OF WATER OF THE REPUBLIC OF SLOVENIA (Slovenia)

GZD (Tunisia)

TUNSEA (Tunisia)

OCEANIS (Tunisia)

THANK YOU FOR YOUR ATTENTION!



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“ “ For litter FREE coasts & seas!