

**Table S1.** Comprehensive list of the megabenthic species identified in this study, with their abundance values, occurrence, depth range, and protection status. \* indicates structuring species. BC, Barcelona Convention; HD, European Community Habitat Directive.

Phylum	Subgroup	Species	Total nº of specimens	Occupancy (%)	Depth range (m)	Protection status
Porifera	Demospongiae	<i>Acanthella acuta</i>	1	0.3	59-60	
		<i>Agelas oroides</i>	3	0.5	62-81	
		<i>Aplysina cavernicola</i>	357	7.9	56-75	Annex II BC
		<i>Axinella polypoides</i> *	2	0.5	75-77	Annex II BC
		<i>Axinella</i> spp.	1897	29.0	55-98	
		<i>Chondrosia reniformis</i>	17	1.5	62-81	
		<i>Crella</i> sp.	6	0.8	63-91	
		<i>Dysidea</i> sp.	11	1.5	75-77	
		<i>Haliclona poecillastroides</i>	14	1.5	55-77	
		<i>Haliclona</i> sp. 1	1	0.3	65-66	
		<i>Haliclona</i> sp. 2	21	0.8	66-67	
		<i>Haliclona</i> sp. 3	23	3.8	61-98	
		<i>Hexadella racovitzai</i>	39	6.4	57-91	
		<i>Ircinia</i> sp.	2	0.3	99-101	
		<i>Keratosia</i> sp. 1	44	4.9	59-73	
		<i>Keratosia</i> sp. 3	9	1.5	55-76	
		<i>Keratosia</i> sp. 4	2	0.5	74-75	
		<i>Raspailia (raspailia) viminalis</i>	6	0.5	80-81	
		<i>Sarcotragus foetidus</i> *	57	4.9	55-98	Annex II BC
		<i>Spongia lamella</i> *	20	3.6	75-98	Annex III BC
		<i>Tethya citrina</i>	1	0.3	90-91	
		Porifera sp. 3	5	1.0	62-69	
		Porifera sp. 5	19	2.8	57-98	
		Porifera sp. 17	1	0.3	78-94	
		Porifera sp. 19	27	4.4	57-81	
		Porifera sp. 24	1	0.3	72-73	
		Porifera sp. 45	19	4.6	61-90	
		Porifera sp. 46	5	0.8	62-72	
		Porifera sp. 47	4	0.5	62-69	
		Porifera sp. 54	2	0.3	103-104	
		Porifera sp. 57	14	2.8	97-98	

		Porifera sp. 58	3	0.5	75-76	
	Homoscleromorpha	<i>Oscarella</i> spp.	2	0.5	99-101	
Cnidaria	Anthozoa	<i>Alcyonium acaule</i>	93	6.4	57-92	
		<i>Alcyonium coralloides</i>	358	10.3	55-71	
		<i>Alcyonium palmatum</i> *	49	9.5	74-104	
		<i>Antipathella subpinnata</i> *	34	2.8	61-69	Annex II & III BC; Annex II CITES; IUCN Near Threatened
		<i>Caryophyllia</i> spp.	1	0.3	78-79	
		<i>Cerianthus membranaceus</i>	16	4.6	59-99	
		<i>Eunicella cavolini</i> *	3329	22.8	55-78	IUCN Near Threatened
		<i>Eunicella verrucosa</i> *	185	22.1	55-90	IUCN Vulnerable
		<i>Funiculina quadrangularis</i> *	2	0.5	103-104	IUCN Vulnerable
		<i>Leptogorgia sarmentosa</i> *	6	1.5	63-98	
		<i>Pachyceriathus solitarius</i>	1	0.3	98-99	
		<i>Paramuricea clavata</i> *	207	9.7	55-78	IUCN Vulnerable
		<i>Parazoanthus axinellae</i>	1233	22.6	55-91	
		<i>Pennatula phosphorea</i> *	5	1.0	84-103	IUCN Vulnerable
		<i>Pennatula rubra</i> *	4	1.0	97-99	IUCN Vulnerable
		<i>Scleractinia</i> sp. 2	8	1.3	59-75	
		<i>Veretillum cynomorium</i> *	2	0.5	100-101	
	Hydrozoa	<i>Eudendrium</i> sp.	29	3.3	61-91	
		<i>Lytocarpia myriophyllum</i> *	1231	36.7	61-101	
		<i>Nemertesia antennina</i>	4	0.5	90-91	
		Hydrozoa sp. 1	44	4.6	63-104	
		Hydrozoa sp. 2	17	0.8	59-91	
Annelida	Echiuroidea	<i>Bonellia viridis</i>	49	7.9	55-104	
	Sabellida	<i>Acromegalomma</i> sp.	1	0.3	86-87	
		<i>Apomatus/Protula</i> complex	21	4.6	65-92	
		<i>Filograna/Salmacina</i> complex	465	25.4	60-91	
		<i>Myxicola</i> sp.	14	3.1	63-95	
		<i>Sabella spallanzanii</i>	11	2.3	66-76	

		<i>Sabella</i> sp.	7	1.3	67-74	
		Sabellidae	37	5.1	102-104	
		Serpulidae	10	2.1	64-101	
Mollusca	Bivalvia	<i>Neopycnodonte cochlear</i>	18	0.5	99-101	
		<i>Pteria hirundo</i>	2	0.5	60-61	
	Gastropoda	<i>Felimare</i> sp.	2	0.5	62-86	
		<i>Flabellina</i> sp.	6	0.5	71-79	
		Muricidae	1	0.3	85-86	
		Trochoidea	2	0.3	77-80	
		Vetigastropoda	1	0.3	76-77	
Arthropoda	Crustacea	<i>Ethusa mascarone</i>	1	0.3	103-104	
		<i>Munida</i> sp.	2	0.5	80-81	
		Paguridae	2	0.5	73-86	
		<i>Palinurus elephas</i>	1	0.3	65-66	Annex III BC; IUCN Vulnerable
		<i>Scyllarus arctus</i>	1	0.3	96-97	Annex III BC; IUCN Data Deficient
Bryozoa	Gymnolaemata	<i>Adeonella calveti</i>	1	0.3	60-69	
		<i>Pentapora</i> sp.*	609	20.5	57-101	
		<i>Reteporella</i> spp.	106	14.9	57-91	
		<i>Smittina cervicornis</i>	163	17.4	57-91	
		<i>Turbicellepora</i> sp.	67	9.2	55-74	
	Stenolaemata	<i>Fron dipora verrucosa</i>	8	2.1	60-73	
Echinodermata	Asteroidea	<i>Echinaster sepositus</i>	11	2.6	55-84	
		<i>Hacelia attenuata</i>	8	1.8	60-71	
	Crinoidea	<i>Leptometra phalangium</i>	5	0.5	94-99	
	Echinoidea	<i>Centrostephanus longispinus</i>	3	0.8	65-76	Annex II BC; Annex IV HD
		<i>Cidaris cidaris</i> / <i>Stylocidaris affinis</i>	15	2.6	55-90	

	Holothuroidea	<i>Holothuria forskali</i>	6	0.8	60-70
		<i>Holothuria poli</i>	169	11.5	59-104
		<i>Holothuria tubulosa</i>	8	1.3	61-91
		<i>Parastichopus regalis</i>	10	2.3	79-104
	Ophiuroidea	<i>Amphiura</i> sp.	6	0.8	75-91
		<i>Astrospartus mediterraneus</i>	132	10.8	55-70
Chordata	Aplousobranchia	<i>Diazona violacea</i>	1	0.3	91-92
	Phlebobranchia	<i>Ciona</i> sp.	2	0.5	78-80
	Stolidobranchia	<i>Halocynthia papillosa</i>	3	0.8	57-67