

Table S1. List of the terms and search criteria used in the bibliographic review performed on the all data bases in the Web of Knowledge inside the respective searches for Marine protected area + effect; Marine protected area + ecosystem service and marine protected area + benefit.

search criteria	Term	# articles	%	search criteria	Term	# articles	%	search criteria	Term	# articles	%
effect*	effect	3,910	100.00	ecosystem service	Ecosystem Service	853	100.00	benefit	benefits	1722	100.00
Physical attributes, habitats, seascapes and ecosystems				provisioning services				provisioning service benefits			
climate	climate	11	0.28	wind or wave	wind or waves	54	6.33	wind energy and wave energy	wind energy and wave energy	1	0.06
"on hydrology"	on hydrology	0	0.00	wind facilit* or wave facilit*	wind or wave facilities	5	0.59	seafood quality	seafood quality	1	0.06
"on habitat"	on habitat	84	2.15	wind or wave and energy	wind or waves energy	25	2.93	recreational fishing or "recreational fishery" or "recreational fisheries" or "sport fishing"	recreational fishing	68	3.95
coast* near/4 integrity	coastal integrity	2	0.05	protect NEAR/4 rocky shore	protect rocky shore	0	0.00	abiotic resource	abiotic resources	0	0.00
refuge near/4 life history or refuge near/4 larva* or refuge near/4 juvenil*	refuge areas for life history	2	0.05	protect NEAR/4 beach	protect beaches	3	0.35	"ornamental" or "ornamental resource"	ornamental resources	3	0.17
Refuge	refuge	113	2.89	beach	beaches	41	4.81	traditional fishing or traditional fisher* commercial fishing or "commercial fisheries" or "commercial fishing"	traditional fishing	73	4.24
habitat NEAR/4 naturality	habitat naturality	0	0.00	rocky shore	rocky shore	5	0.59		comercial fishing	445	25.84
habitat NEAR/4 complexity	habitat complexity	75	1.92	protect NEAR/4 dune or protect NEAR/4 sand dune	protect sand dunes	2	0.23	chemical	chemical	30	1.74
habitat near4 quality	habitat quality	60	1.53	dune OR sand dune	sand dunes	11	1.29	chemic* near/5 benef* or chemic* near/5 resource*	chemical resources	0	0.00
"critical habitat" or "key habitat"	critical or key habitat	28	0.72	vegetal or shell or sand	vegetal/shell/sand	28	3.28	medical or medicinal	medical or medicinal	11	0.64
Species, populations and fisheries				bigger fish or larger fish or bigger individ* or larger individ*	bigger fish	111	13.01	Pharmaceutical	Pharmaceutical	3	0.17
individual* NEAR/4 size or fish* NEAR/4 size	individual size	204	5.22	smaller fish	smaller fish	57	6.68	genetic resource	genetic resources	38	2.21
"size at maturity"	size at maturity	13	0.33	fish size	fish size	41	4.81	genetic near/4 resource*	genetic resource	10	0.58
population NEAR4 abundance or fish NEAR4 abundance	population abundance	213	5.45	more abundant fish	more abundant fish	14	1.64	Traditional resources	traditional resources	0	0.00
population near/4 structure	population structure	286	7.31	less abundant fish	less abundant fish	5	0.59	habitat near/5 benefit*	Habitat	49	2.85
"life span"	life span	7	0.18	fish abundance	fish abundance	59	6.92	Regulating service benefits			0.00
"carrying capacity"	carrying capacity	32	0.82	higher biomass	higher biomass	48	5.63	coastal protection	coastal protection	16	0.93
"spawning stock"	spawning stock	21	0.54	biomass	biomass	88	10.32	"climate change" and mitigation	climate change mitigation	25	1.45
larva NEAR4 survival	larval survival	9	0.23	species fecundity or reproductive capacity	species fecundity/reproductive capacity	4	0.47	"climate regulation" or "climate mitigation"	climate regulation/mitigation	8	0.46
"life history"	life history	243	6.21	fishery stock	fishery stock	38	4.45	spawning stock	spawning stock	11	0.64
home-range or home range or homerange	home range	55	1.41	traditional resources	traditional resources	30	3.52	ecosystem stability	ecosystem stability	1	0.06
at-risk NEAR/4 species	at-risk species	19	0.49	new resource or new potential resource	new/potential resources	227	26.61	stability and ecosystem	stability and ecosystem	11	0.64
"rare species"	"rare species"	7	0.18	chemical defense or resistant material	chemical defenses/resistant materials	1	0.12	stability	stability	27	1.57
"key species"	"key species"	23	0.59	Regulating services				market stability	market stability	1	0.06
"endemic species"	"endemic species"	42	1.07	erosion or sedimentation	erosion/sedimentation	69	8.09	market	market	83	4.82
"focal species"	focal species	9	0.23	prevent sedimentation or avoid sedimentation or reduce sedimentation	prevent sedimentation	10	1.17	shoreline and stability	shoreline and stability	1	0.06
commercial fishing or "commercial fisheries" or "commercial fishing"	commercial fishing	923	23.61	prevent erosion or avoid erosion or reduce erosion	prevent erosion	20	2.34	larval dispersal	larval dispersal	51	2.96
traditional fishing or traditional fisher* fisher	traditional fishing	95	2.43	protect NEAR/4 shore	protect the shore	1	0.12	uncertain	uncertain	0	0.00
Ecosystem functioning and regulations				at-risk NEAR/4 species	at-risk species	2	0.23	ecosystem imbalance	ecosystem imbalance	1	0.06
biodiversity	biodiversity	1061	27.14	"rare species"	"rare species"	2	0.23	"prevention mass mortality"	Prevention of mass mortality	0	0.00
Connectivity	Connectivity	213	5.45	"key species"	"key species"	3	0.35	cultural service benefits			0.00
species NEAR4 richness	species richness	284	7.26	"endemic species"	"endemic species"	7	0.82	Landscape and seascape	landscape/seascape	87	5.05
"interspecific relationship"	Interspecific relationship	9	0.23	"focal species"	focal species	1	0.12	ecotourism	ecotourism	54	3.14
"natural selection"	Natural selection	12	0.31	apical specie or long-living predator	apical specie or long-living predator	1	0.12	photography	photography	7	0.41
"genetic diversity"	genetic diversity	62	1.59	at-risk NEAR/4 ecosystem	at-risk ecosystems	2	0.23	Nautical sport	nautical sport	0	0.00
genetic or genomic	genetic	186	4.76	at-risk NEAR/4 communit*	at-risk communities	1	0.12	recreational	recreational	176	10.22
"genetic structure"	genetic structure	54	1.38	rare NEAR/4 communit* OR singular NEAR/4 communit* OR unique NEAR/4 communit*	unique communities	1	0.12	Reference condition	Reference condition	0	0.00
"food web"	food web	121	3.09	rare NEAR/4 ecosyst* OR singular NEAR/4 ecosyst* OR unique NEAR/4 ecosyst*	unique ecosystems	7	0.82	tourist or touristic or tourism	tourist or touristic or tourism	214	12.43
				"key ecosystem"	key ecosystems	6	0.70	aquatic activity	aquatic activity	0	0.00

