

Unravelling the ecological role and trophic relationships of uncommon and threatened elasmobranchs in the western Mediterranean Sea

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Marine Ecology Progress Series 539: 225–240 (2015)

Supplement.

Table S1. Sample size (n), mean and standard deviation of $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ values by species, of the potential prey of the studied elasmobranchs sampled in the western Mediterranean Sea.

Species	N	$\delta^{13}\text{C}$ (‰)	$\delta^{15}\text{N}$ (‰)
CRUSTACEA			
<i>Aegaeon cataphractus</i>	3	-16.98±0.72	8.94±0.30
<i>Aegaeon lacazei</i>	3	-17.3±0.22	8.48±0.34
<i>Alpheus glaber</i>	3	-17.97±0.84	7.82±0.24
<i>Amphipodo sp.</i>	1	-21.57	8.62
<i>Calappa granulata</i>	1	-16.73	7.51
<i>Chlorotocus crassicornis</i>	3	-19.71±0.63	6.99±0.47
<i>Cirolana sp</i>	3	-20.4±3.50	10.01±1.14
<i>Dardanus arrosor</i>	3	-17.89±0.33	9.66±0.25
<i>Eusergestes arcticus</i>	3	-19.44±0.46	7.62±0.31
<i>Goneplax rhomboides</i>	3	-18.34±1.32	8.29±0.48
<i>Inachus thoracicus</i>	1	-18.4	9.66
<i>Liocarcinus depurator</i>	3	-18.32±0.16	8.30±0.48
<i>Macropipus tuberculatus</i>	3	-18.49±0.69	7.44±0.16
<i>Macropodia longipes</i>	3	-17.81±0.57	6.47±0.26
<i>Medorippe lanata</i>	3	-17.77±0.27	9.12±0.20
<i>Meganyctiphanes norvegica</i>	1	-20.32	4.65
<i>Monodaeus couchii</i>	1	-21.4	6.44
<i>Munida intermedia</i>	3	-18.31±0.54	6.38±0.83
<i>Munida rutilanti</i>	3	-18.48±0.31	6.59±0.24
<i>Munida tenuimana</i>	1	-18.7	6.93
<i>Nephrops norvegicus</i>	3	-18.81±0.07	6.26±0.14
<i>Pagurus cuanensis</i>	1	-20.02	7.50
<i>Pagurus excavatus</i>	2	-17.96±0.07	8.94±0.01
<i>Pagurus prideaux</i>	3	-17.38±0.33	8.56±0.23
<i>Parapenaeus longirostris</i>	3	-18.21±0.12	8.16±0.40
<i>Pasiphaea sivado</i>	3	-19.47±0.27	6.63±0.63

<i>Species</i>	N	$\delta^{13}\text{C}$ (‰)	$\delta^{15}\text{N}$ (‰)
<i>Pilumnus villosissimus</i>	2	-10.96±2.54	6.63±0.42
<i>Plesionika antigai</i>	3	-19.34±0.37	7.20±0.27
<i>Plesionika edwardsii</i>	3	-18.48±0.34	7.16±0.44
<i>Plesionika heterocarpus</i>	3	-18.57±0.14	8.09±0.38
<i>Plesionika gigliolii</i>	3	-18.2±0.03	6.53±0.10
<i>Pontophilus spinosus</i>	3	-16.29±1.71	7.03±1.55
<i>Processa canaliculata</i>	3	-19.14±0.14	7.75±0.36
<i>Sergia robusta</i>	3	-18.81±0.55	7.43±0.55
<i>Solenocera membranacea</i>	5	-18.35±0.64	8.46±0.74
<i>Squilla mantis</i>	6	-17.75±1.03	9.84±0.68
MOLLUSCA			
<i>Abralia veranyi</i>	3	-19.4±0.23	8.93±0.73
<i>Alloteuthis media</i>	3	-19.72±0.25	9.89±0.44
<i>Alloteuthis subulata</i>	5	-19.05±0.28	9.35±1.34
<i>Bolinus brandaris</i>	3	-17.61±0.83	9.66±0.89
<i>Doris pseudoargus</i>	1	-17.01	9.24
<i>Eledone cirrhosa</i>	3	-19.13±0.49	8.09±0.11
<i>Eledone moschata</i>	1	-16.68	9.72
<i>Epitonium clathrus</i>	2	-17.69±0.92	6.57±2.04
<i>Euspira fusca</i>	2	-16.56±1.61	9.30±1.05
<i>Galeodea echinophora</i>	2	-18.48±1.17	8.34±0.92
<i>Illex coindetti</i>	10	-19.12±0.26	8.35±0.92
<i>Loligo vulgaris</i>	10	-18.04±0.36	11.16±0.38
<i>Neorossia caroli</i>	1	-19.95	7.35
<i>Octopus vulgaris</i>	3	-18.04±1.37	8.62±8.62
<i>Pecten jacobaeus</i>	2	-18.84±0.39	5.90±0.21
<i>Rossia macrosoma</i>	3	-18.95±0.89	7.98±1.78
<i>Scaphopoda sp</i>	3	-17.55±0.72	8.76±1.13
<i>Sepia elegans</i>	3	-18.54±0.31	9.13±0.39
<i>Sepia officinalis</i>	3	-18.03±0.34	9.14±0.53
<i>Sepia orbignyana</i>	3	-19.51±0.51	7.16±0.42
<i>Sepietta oweniana</i>	3	-19.41±0.25	8.32±0.43
<i>Sepiola affinis</i>	3	-19.43±0.26	8.82±1.00
<i>Turritella sp</i>	3	-18.54±0.91	5.44±0.62
TELEOSTEI			
<i>Aphia minuta</i>	3	-19.52±0.15	8.51±0.54
<i>Argentina sphyraena</i>	3	-19.19±0.44	9.30±1.05
<i>Arnoglossus laterna</i>	3	-19.21±0.26	8.74±0.03
<i>Arnoglossus rueppelii</i>	3	-19.52±0.33	7.58±0.06
<i>Blennius ocellaris</i>	3	-19.34±0.24	10.12±0.34
<i>Boops boops</i>	3	-19.73±0.39	9.29±0.60
<i>Callionymus maculatus</i>	3	-18.84±0.10	8.49±0.31
<i>Callionymus reticulatus</i>	2	-19.86±0.11	8.43±0.10
<i>Capros aper</i>	3	-20.15±0.26	8.46±0.39
<i>Carapus acus</i>	1	-20.05	7.52

<i>Species</i>	N	$\delta^{13}\text{C}$ (‰)	$\delta^{15}\text{N}$ (‰)
<i>Cepola macrophthalma</i>	3	-20.42±0.05	8.14±0.04
<i>Chelidonichthys cuculus</i>	3	-19.57±0.16	9.10±0.28
<i>Chelidonichthys lucerna</i>	2	-18.19±0.83	10.37±0.16
<i>Citharus linguatula</i>	3	-18.7±0.32	10.78±0.60
<i>Conger conger</i>	1	-19.03	9.78
<i>Deltentosteus quadrimaculatus</i>	3	-17.65±0.92	10.38±0.55
<i>Diplodus vulgaris</i>	3	-17.92±0.62	11.91±0.04
<i>Engraulis encrasicolus</i>	10	-18.97±0.17	8.09±0.33
<i>Gadiculus argenteus</i>	3	-19.43±0.13	8.85±0.69
<i>Gaidropsarus biscayensis</i>	2	-19.66±0.08	8.19±0.17
<i>Gobius niger</i>	2	-18.16±0.02	10.31±0.08
<i>Helicolenus dactylopterus</i>	3	-19.89±0.27	7.69±0.42
<i>Lepidopus caudatus</i>	3	-19.71±0.10	8.43±0.24
<i>Lepidorhombus boscii</i>	3	-19.11±0.39	8.10±0.71
<i>Lepidorhombus whiffiagonis</i>	1	-20.13	8.86
<i>Lepidotrigla cavillone</i>	2	-18.2±0.30	9.41±0.04
<i>Lesueurigobius friesii</i>	3	-18.98±0.47	10.13±0.49
<i>Lesueurigobius suerii</i>	3	-18.34±0.06	9.81±0.56
<i>Lophius budegassa</i>	10	-18.82±0.63	9.84±1.01
<i>Lophius piscatorius</i>	10	-18.43±0.27	10.51±0.56
<i>Merluccius merluccius</i>	10	-19.17±0.24	8.69±0.50
<i>Microchirus variegatus</i>	3	-20.35±2.51	9.38±0.58
<i>Micromesistius poutassou</i>	3	-19.45±0.10	8.75±0.22
<i>Mullus barbatus</i>	3	-17.64±0.98	10.78±0.59
<i>Mullus surmuletus</i>	4	-17.92±1.02	10.57±0.89
<i>Notoscopelus elongatus</i>	2	-20.62±0.83	8.41±0.20
<i>Pagellus erythrinus</i>	3	-16.62±0.60	11.56±0.18
<i>Phycis blennoides</i>	3	-19.72±0.13	9.08±0.17
<i>Sardina pilchardus</i>	10	-20.02±0.41	8.14±0.33
<i>Sardinella aurita</i>	10	-18.77±0.18	8.78±0.55
<i>Scomber colias</i>	10	-18.41±0.06	7.80±0.30
<i>Scomber scombrus</i>	10	-18.58±0.47	10.79±0.36
<i>Scorpaena notata</i>	2	-17.87±0.08	11.48±1.37
<i>Serranus cabrilla</i>	3	-18.05±0.18	10.94±0.34
<i>Serranus hepatus</i>	3	-18.23±0.35	10.68±0.23
<i>Solea solea</i>	1	-16.94	10.52
<i>Spicara maena</i>	3	-19.72±0.17	9.51±0.67
<i>Spicara smaris</i>	3	-19.15±0.57	9.58±1.04
<i>Sprattus sprattus</i>	3	-19.73±0.34	8.21±0.20
<i>Symphurus nigrescens</i>	2	-18.74±0.30	10.00±0.59
<i>Synchiropus phaeton</i>	3	-19.47±0.16	7.91±0.12
<i>Trachinus draco</i>	3	-18.57±0.19	9.07±0.03
<i>Trachurus mediterraneus</i>	10	-18.09±0.13	10.82±0.23
<i>Trachurus trachurus</i>	10	-19.12±0.11	9.13±0.19
<i>Trigla lyra</i>	3	-17.44±0.06	10.01±0.25

<i>Species</i>	N	$\delta^{13}\text{C}$ (‰)	$\delta^{15}\text{N}$ (‰)
<i>Trisopterus minutus</i>	3	-19.14±0.12	9.30±0.13
<i>Uranoscopus scaber</i>	1	-17.5	10.75
POLYCHAETA			
<i>Aphrodita aculeata</i>	3	-17.03±0.55	8.38±1.74
CNIDARIA			
<i>Calliactis parasitica</i>	1	-19.56	8.47
<i>Pelagia noctiluca</i>	3	-18.77±0.15	5.59±0.17
TUNICATA			
<i>Ascidia mentula</i>	3	-20.35±0.63	7.24±0.25
<i>Corella parallelogramma</i>	1	-20.2	8.08
<i>Molgula sp.</i>	3	-19.14±0.79	8.42±0.35
<i>Salpa sp</i>	3	-18.97±1.16	8.51±2.39
ECHINODERMATA			
<i>Gracilechinus acutus</i>	3	-20.55±0.17	6.58±0.13
<i>Leptometra phalangium</i>	3	-16.07±0.99	5.29±1.10
<i>Parastichopus regalis</i>	3	-19.74±0.30	9.01±1.25
CHONDRICHTYA			
<i>Etmopterus spinax</i>	10	-19.2±0.95	8.18±0.41
<i>Galeus melastomus</i>	10	-17.95±0.24	9.01±0.31

Table S2. Diet composition of sharks from the NW Mediterranean sea (Squaliformes, Carcharhiniformes and Hexanchiformes). N is sample size, %V is the vacuity percentage and TL is the Trophic Level from stomachs. Frequency of occurrence (%F) is the percentage of stomachs with a specific type of prey in relation to the total number of stomachs containing food; weight composition (%W), expressed as the percentage contribution of each prey in weight to the whole content; standardized index of relative importance (%IRI=(IRI/ΣIRI)×100), where IRI=%F(%N+%W) and %N is the numeric composition or the percentage of each prey in number to the whole content. In *A. vulpinus* the stomach was not available

	<i>C. granulosus</i>			<i>C. coelolepis</i>			<i>D. licha</i>			<i>G. galeus</i>			<i>H. griseus</i>			<i>O. centrina</i>			<i>S. acanthias</i>			<i>S. rostratus</i>		
	N = 14; %V = 64.3 TL = 4.4			N = 53; %V = 41.5 TL = 4.6			N = 30; %V = 43.3 TL = 4.6			N = 1; %V = 0 TL = 4.9			N = 6; %V = 16.7 TL = 4.7			N = 3; %V = 66.7 TL = 3.1			N = 4; %V = 50.0 TL = 4.4			N = 5; %V = 20.0 TL = 4.8		
	T. Length 81.9±19.8			T. Length 45.7±13.1			T. Length 47.2±21.6			T. Length 137			T. Length 97.9±21.6			T. Length 43.1±4.6			T. Length 55.9±26.7			T. Length 89.7±10.8		
	%F	%W	%IRI	%F	%W	%IRI	%F	%W	%IRI	%F	%W	%IRI	%F	%W	%IRI	%F	%W	%IRI	%F	%W	%IRI	%F	%W	%IRI
POLYCHAETA									0.34															
<i>Aphrodita aculeata</i>																100	100	100						
Unidentified Polychaeta							5.88	0.00	0.34															
CEPHALOPODA			55.02			57.31						35.39			52.14						54.61			93.03
<i>Abralya verany</i>										100.00	1.34	17.34										25.00	0.85	6.68
<i>Alloteuthis media</i>				3.23	6.22	1.46																		
<i>Eledone cirrhosa</i>																			50	84.21	54.61			
<i>Histioteuthis reversa</i>				12.90	16.84	14.13																25.00	1.26	13.13
<i>Histioteuthis sp.</i>																						25.00	94.32	53.41
<i>Illex coindetii</i>													20.00	17.90	24.43									
<i>Loligo vulgaris</i>																						25.00	0.81	6.66
<i>Octopus vulgaris</i>										100.00	2.77	18.05												
<i>Pteroctopus tetracirrhus</i>				3.23	3.59	0.79																		
Ommastrephidae				6.45	20.62	6.91																		
<i>Todarodes sagittatus</i>	20	14.18	17.09	3.23	11.13	2.14																		
Unidentified Cephalopoda	20	7.97	13.98	3.23	2.80	0.69																		
Unidentified Octopoda				6.45	3.79	2.25																		
Unidentified Teuthida	20	27.89	23.94	22.58	14.66	28.93							20.00	66.02	27.72							25.00	1.32	13.16
SCAPHOPODA						0.31																		
<i>Dentallium sp.</i>				3.23	0.03	0.31																		
NATANTIA			15.06			17.74			15.82												12.59			

	<i>C. granulosus</i>			<i>C. coelolepis</i>			<i>D. licha</i>			<i>G. galeus</i>			<i>H. griseus</i>			<i>O. centrina</i>			<i>S. acanthias</i>			<i>S. rostratus</i>		
	N = 14; %V = 64.3 TL = 4.4 T. Length 81.9±19.8			N = 53; %V = 41.5 TL = 4.6 T. Length 45.7±13.1			N = 30; %V = 43.3 TL = 4.6 T. Length 47.2±21.6			N = 1; %V = 0 TL = 4.9 T. Length 137			N = 6; %V = 16.7 TL = 4.7 T. Length 97.9±21.6			N = 3; %V = 66.7 TL = 3.1 T. Length 43.1±4.6			N = 4; %V = 50.0 TL = 4.4 T. Length 55.9±26.7			N = 5; %V = 20.0 TL = 4.8 T. Length 89.7±10.8		
	%F	%W	%IRI	%F	%W	%IRI	%F	%W	%IRI	%F	%W	%IRI	%F	%W	%IRI	%F	%W	%IRI	%F	%W	%IRI	%F	%W	%IRI
<i>Acantephyra eximia</i>				19.35	1.60	13.96																		
<i>Acantephyra pelagica</i>				3.23	0.42	0.66																		
<i>Aristeus antennatus</i>				3.23	0.43	0.36																		
<i>Pasiphaea sp.</i>							5.88	2.34	0.73															
<i>Solenocera membranacea</i>																			50.00	0.19	12.59			
Unidentified Natantia	20	10.12	15.06	9.68	0.15	2.77	29.41	0.18	13.63															
OTHER CRUSTACEA																								1.45
<i>Nephrops norvegicus</i>							5.88	6.63	1.45															
TELEOSTEI			29.92			24.07			26.50						47.86									32.80
<i>Chauliodus sloani</i>				3.23	1.01	0.44																		
<i>Echiodon dentatus</i>							5.88	0.08	0.35															
<i>Lampanyctus crocodilus</i>				6.45	1.20	1.53																		
<i>Lepidion lepidion</i>							5.88	21.37	4.28															
<i>Merluccius merluccius</i>										100.00	95.88	64.61												
Unidentified Teleostei	20	39.84	29.92	19.35	13.59	22.11	41.18	2.55	21.88				60.00	16.08	47.86				50.00	15.60	32.80			
CHONDRICHTHYANS						0.87			45.29															
<i>Galeus melastomus</i>							11.76	29.52	11.30															
<i>Etmopterus spinax</i>				3.23	1.90	0.56	23.53	28.15	27.06															
Unidentified Chondrichthyans				3.23	0.01	0.30	17.65	7.71	6.93															
PYROSOMIDA									1.79															
<i>Pyrosoma atlanticum</i>							5.88	0.63	1.79															
OTHERS									10.3															6.97
Unidentified Foraminifera							17.65	0.01	8.09															
<i>Molgula sp.</i>																						25.00	1.43	6.97
Passeriforme							5.88	0.34	0.39															
Vegetal remains							5.88	0.49	0.42															
Anthropic remains							11.76	0.01	1.35															

Table S3. Diet composition of skates (Rajiformes) from the western Mediterranean Sea. N is sample size, %V is the vacuity percentage and TL is the Trophic Level from stomachs. Frequency of occurrence (%F) is the percentage of stomachs with a specific type of prey in relation to the total number of stomachs containing food; weight composition (%W), expressed as the percentage contribution of each prey in weight to the whole content; standardized index of relative importance (%IRI=(IRI/ΣIRI)×100), where IRI=%F(%N+%W) and %N is the numeric composition or the percentage of each prey in number to the whole content.

	<i>D. oxyrinchus</i>			<i>L. naevus</i>			<i>R. asterias</i>			<i>R. clavata</i>			<i>R. montagui</i>			<i>R. polystigma</i>		
	N = 1; %V = 0			N = 3; %V = 0			N = 39; %V = 2.6			N = 6; %V = 0			N = 8; %V = 0			N = 2; %V = 50.0		
	TL = 3.5			TL = 4.0			TL = 3.8			TL = 4.1			TL = 3.5			TL = 3.1		
	T. Length 30.5±4.4			T. Length 49.7±14.4			T. Length 30.1±11.3			T. Length 42.6±25.9			T. Length 41.4±17.0			T. Length 30.7±8.0		
	%F	%W	%IRI	%F	%W	%IRI	%F	%W	%IRI	%F	%W	%IRI	%F	%W	%IRI	%F	%W	%IRI
CEPHALOPODA									1.27									
<i>Illex coindetii</i>							2.78	14.54	1.27									
AMPHIPODA									1.76						24.42			100
Amphipoda Gammaridae							8.33	0.93	1.76				50.00	7.61	24.42	100.00	100.00	100.00
ISOPODA						5.37												
Unidentified Isopoda				33.33	4.20	5.37	8.33	0.20	1.00									
ANOMURA			100.00			36.07			4.82			3.29						
<i>Munida intermedia</i>	100.00	100.00	100.00	33.33	25.42	36.07	8.33	10.18	4.82	16.67	2.67	3.29						
BRACHYURA									32.51			32.37						
<i>Calappa granulata</i>							2.78	0.62	0.11									
<i>Goneplax rhomboides</i>							11.11	2.30	2.03	33.33	3.01	7.17						
<i>Liocarcinus depurator</i>							30.56	6.69	23.57									
<i>Macropipus tuberculatus</i>							13.89	5.45	6.71									
<i>Monodaeus couchii</i>										50.00	7.83	23.91						
<i>Pilumnus villosissimus</i>							2.78	0.25	0.08									
Unidentified Brachyura										16.67	1.04	1.29						
NATANTIA						3.84			56.34			23.73			75.58			
<i>Chlorotocus crassicornis</i>										16.67	6.47	5.35						
<i>Lophogaster typicus</i>							2.78	0.28	0.15									
<i>Pasiphaea multidentata</i>							2.78	1.05	0.15									
<i>Pasiphaea sivado</i>							2.78	0.23	0.21									
<i>Plesionika sp.</i>							2.78	0.81	0.26									
<i>Pontocaris lacazei</i>										16.67	0.03	0.03	12.5	5.43	1.50			
<i>Processa canaliculata</i>										16.67	0.17	0.21	12.5	0.78	0.73			
<i>Solenocera membranacea</i>							25.00	38.93	42.28	33.33	1.54	5.48	37.5	73.45	57.98			

	<i>D. oxyrinchus</i>			<i>L. naevus</i>			<i>R. asterias</i>			<i>R. clavata</i>			<i>R. montagui</i>			<i>R. polystigma</i>		
	N = 1; %V = 0 TL = 3.5 T. Length 30.5±4.4			N = 3; %V = 0 TL = 4.0 T. Length 49.7±14.4			N = 39; %V = 2.6 TL = 3.8 T. Length 30.1±11.3			N = 6; %V = 0 TL = 4.1 T. Length 42.6±25.9			N = 8; %V = 0 TL = 3.5 T. Length 41.4±17.0			N = 2; %V = 50.0 TL = 3.1 T. Length 30.7±8.0		
	%F	%W	%IRI	%F	%W	%IRI	%F	%W	%IRI	%F	%W	%IRI	%F	%W	%IRI	%F	%W	%IRI
Unidentified Natantia				33.33	3.00	3.84	30.56	4.61	13.29	33.33	5.14	12.65	37.5	12.73	15.37			
OTHER CRUSTACEA									0.09									
<i>Squilla mantis</i>							2.78	0.30	0.09									
TELEOSTEI						54.72			2.20			40.61						
Callionymidae							2.78	0.28	0.09									
<i>Callyonimus maculatus</i>							2.78	1.27	0.17	16.67	0.85	1.05						
<i>Carapus acus</i>							2.78	0.91	0.14									
<i>Deltentosteus quadrimaculatus</i>							2.78	0.42	0.10									
<i>Engraulis encrasicolus</i>							2.78	0.19	0.08	16.67	24.55	10.29						
<i>Gadiculus argenteus</i>							2.78	6.67	0.75									
<i>Gnathophis mystax</i>				33.33	16.73	17.71												
Gobiidae							2.78	0.20	0.08									
<i>Gobius niger</i>																		
<i>Lampanyctus crocodilus</i>										16.67	11.58	14.25						
<i>Lesuerigobius friesii</i>							2.78	0.19	0.08									
<i>Lesuerigobius suerii</i>							2.78	0.14	0.08									
<i>Lophius budegassa</i>										16.67	0.23	0.28						
<i>Trachurus trachurus</i>										16.67	34.82	13.95						
<i>Symphurus nigrescens</i>				33.33	47.66	33.18												
Unidentified Teleostei				33.33	3.00	3.84	5.56	2.36	0.65	16.67	0.06	0.78						

Table S4. Diet composition of rays (Torpediniformes and Myliobatiformes) from the western Mediterranean Sea. N is sample size, %V is the vacuity percentage and TL is the Trophic Level from stomachs. Frequency of occurrence (%F) is the percentage of stomachs with a specific type of prey in relation to the total number of stomachs containing food; weight composition (%W), expressed as the percentage contribution of each prey in weight to the whole content; standardized index of relative importance (%IRI=(IRI/ΣIRI)×100), where IRI=%F(%N+%W) and %N is the numeric composition or the percentage of each prey in number to the whole content. In *M. aquila* and *M. mobular* the stomach was not available.

	<i>T. marmorata</i>			<i>T. nobiliana</i>			<i>T. torpedo</i>			<i>G. altavela</i>		
	N = 16; %V = 75.0			N = 3; %V = 33			N = 28; %V = 78.6			N = 1; %V = 0		
	TL = 4.2			TL = 4.2			TL = 4.2			TL = 4.1		
	T. Length 26.0±35.4			T. Length 88.3±3.18			T. Length 21.0±8.8			T. Length 62.0		
	%F	%W	%IRI	%F	%W	%IRI	%F	%W	%IRI	%F	%W	%IRI
TELEOSTEI			100			100			100			
<i>Deltentosteus quadrimaculatus</i>							16.67	7.41	8.39			
Gobiidae							16.67	1.85	6.45			
<i>Gobius niger</i>							33.33	53.70	60.65			
<i>Lampanyctus crocodilus</i>												
<i>Lepidion lepidion</i>				50.00	74.65	62.33						
<i>Microchirus variegatus</i>							16.67	14.81	10.97			
Myctophidae	25.00	47.99	14.65									
Unidentified Teleostei	75.00	52.01	85.35	50.00	25.35	37.67	16.67	22.22	13.55			
ANOMURA										100.00	100.00	100.00
<i>Munida intermedia</i>										100.00	100.00	100.00

Table S5. Main prey group based on dietary metrics (%IRI= percentage of the index of relative importance; %FO= percentage of frequency of occurrence; %N= percentage in number; occurrence; IMM=isotopic mixing models outputs of 22 elasmobranchs from the Mediterranean Sea (M). NW: North-Western, SC: South-Central, C: Central, W: Western, SE: South-East, E: East.

Species	Location	N	Index	Prey groups	Reference
Carcharhiniformes					
<i>G. galeus</i>	NW	1	%IRI	Gadiformes, Octopoda, Teuthida	Present study
<i>P. glauca</i>	C	75	%N	Clupeiformes, Gadiformes, Perciformes, Sepiida,	Politi (1997)
<i>P. glauca</i>	C	139	%FO	Teuthida, Teleostei, Sepiida	Clo and Bianchi (1997)
<i>P. glauca</i>	NW	5	IMM	Teleostei, Teuthida	Cardona et al. (2012)
Hexanchiformes					
<i>H. griseus</i>	NW	39	Occurrence	Perciformes, Gadiformes, Clupeiformes	Kabasakal (2004)
<i>H. griseus</i>	C	23	%FO	Perciformes, Cephalopoda	Celona et al. (2005)
<i>H. griseus</i>	NW	6	%IRI	Teuthida, Teleostei	Present study
Lamniformes					
<i>A. vulpinus</i>	Atlantic	19	%FO	Teleostei, Teuthida	Bowman et al. (2000)
Myliobatiformes					
<i>G. altavela</i>	C	1	Occurrence	Perciformes	Psomadakis et al. (2008)
<i>G. altavela</i>	C	7	Occurrence	Clupeiformes	Neifar et al. (2002).
<i>G. altavela</i>	NW	1	%IRI	Anomura	Present study
<i>M. aquila</i>	C		%FO	Crustacea, Gastropoda, Bivalvia	Azouz and Capape (1971)
<i>M. aquila</i>	C	165	%IRI	Bivalvia, Sipunculida, Gastropoda, Crustacea	Jardas et al. (2004)
<i>M. aquila</i>	C	523		Benthic invertebrates, Teleostei	Capapé (1976)
<i>M. mobular</i>	C	1	Occurrence	Euphausiacea	Orsi Relini and Cappello (1992)
<i>M. mobular</i>	C	5	Occurrence	Clupeiformes, Euphausiacea, Myctophiformes	Celona (2004)
<i>M. mobular</i>	C	nd	Occurrence	Crustacea, Teleostei	Serena (2005)
Rajiformes					
<i>D. oxyrinchus</i>	E	97	%IRI	Natantia	Yigin et al. (2010)
<i>D. oxyrinchus</i>	NW	14	%IRI	Cephalopoda, Mysidacea, Natantia	Vannucci (2005)
<i>D. oxyrinchus</i>	NW	1	%IRI	Anomura	Present study
<i>L. naevus</i>	NW	27	%IRI	Natantia, Teleostei	Valls et al. (2011)
<i>L. naevus</i>	NW	3	%IRI	Anomura, Pleuronectiformes, Anguilliformes	Present study
<i>R. asterias</i>	C	880	%FO	Crustacea, Teleostei	Capapé and Quignard (1974)
<i>R. asterias</i>	C	563	%IRI	Crustacea	Cuoco et al. (2005)
<i>R. asterias</i>	C	264	Occurrence	Crustacea	Romanelli et al. (2007)
<i>R. asterias</i>	E	563	%IRI	Brachyura, Teleostei	Serena et al. (2005)
<i>R. asterias</i>	NW	102	%IRI	Brachyura	Navarro et al. (2013)
<i>R. asterias</i>	NW	39	%IRI	Natantia, Brachyura	Present study
<i>R. clavata</i>	C		%FO	Crustacea, Teleostei	Azouz and Capape (1971)
<i>R. clavata</i>	C	1138	%FO	Crustacea, Teleostei, Cephalopoda	Capapé (1975)
<i>R. clavata</i>	C	28	%N	Crustacea, Teleostei, Cephalopoda	Bello (1997)
<i>R. clavata</i>	NW	320	%IRI	Natantia, Reptantia, Teleostei	Valls et al. (2011)
<i>R. clavata</i>	C	428	%IRI	Natantia, Gadiformes	Santic et al. (2012)
<i>R. clavata</i>	C	185	Occurrence	Natantia, Teleostei	Jardas (1972)
<i>R. clavata</i>	E	31	Occurrence	Cephalopoda	Kabasakal (2002)
<i>R. clavata</i>	NW	6	%IRI	Brachyura, Natantia, Myctophiformes, Clupeiformes, Perciformes	Present study
<i>R. montagui</i>	NW	8	%IRI	Natantia, Amphipoda	Present study
<i>R. polystigma</i>	C		%FO	Amphipoda, Brachyura	Azouz and Capape (1971)
<i>R. polystigma</i>	NW	15	%IRI	Natantia, Teleostei	Valls et al. (2011)

<i>R. polystigma</i>	NW	2	%IRI	Amphipoda	Present study
Squaliformes					
<i>C. granulosis</i>	E	43	%N	Perciformes, Teuthida	Megalofonou and Chatzisprou (2006)
<i>C. granulosis</i>	SE	52	Occurrence	Aulopiformes, Cephalopoda, Unidentified Teleostei	Golani and Pisanty (2000)
<i>C. granulosis</i>	SC	16	%FO	Gadiformes, Osmeriformes, Crustacea, Cephalopoda	Capapé (1975)
<i>C. granulosis</i>	NW	14	%IRI	Teleostei, Teuthida, Natantia	Present study
<i>C.coelolepis</i>	NW	86	%IRI	Teuthida, Natantia, Teleostei	Carrasson (1992)
<i>C.coelolepis</i>	NW	53	%IRI	Teuthida, Teleostei, Natantia	Present study
<i>D. licha</i>	NW	97	%FO	Gadiformes, Selachii, Natantia, Cephalopoda	Matallanas (1982)
<i>D. licha</i>	NW	31	%FO	Myctophiformes, Gadiformes, Natantia, Selachii, Cephalopoda	Macpherson (1980)
<i>D. licha</i>	SE	4	Occurrence	Gadiformes	Capapé (1975)
<i>D. licha</i>	SE	8	%FO	Gadiformes, Cephalopoda	Capapé et al. (2008)
<i>D. licha</i>	NW	36	%IRI	Selachii, Teleostei, Natantia	Navarro et al. (2014)
<i>D. licha</i>	NW	30	%IRI	Selachii, Teleostei, Natantia	Present study
<i>O. centrina</i>	NW	102	%IRI	Polychaeta, Sipunculidae, Crustacea Brachyura	Capape (2008)
<i>O. centrina</i>	NW	3	%IRI	Polychaeta	Present study
<i>S. acanthias</i>	C	81	%N	Teleostei, Cephalopoda, Crustacea	Jardas (1972)
<i>S. acanthias</i>	NW	4	%IRI	Octopoda, Teleostei, Natantia	Present study
<i>S. rostratus</i>	E	1	Occurrence	Cephalopoda	Golani (1986)
<i>S. rostratus</i>	NW	5	%IRI	Teuthida, Tunicata	Present study
Torpediniformes					
<i>T. marmorata</i>	C	660	%N	Perciformes	Capape (1979)
<i>T. marmorata</i>	E	84	%IRI	Perciformes, Clupeiformes, Gadiformes	Abdelaziz (1994)
<i>T. marmorata</i>	NW	102	%IRI	Mugiliformes, Perciformes, Cephalopoda	Capape et al. (2007)
<i>T. marmorata</i>	NW	16	%IRI	Myctophiformes	Present study
<i>T. nobiliana</i>	Atlantic	7	%FO	Teleostei	(Bowman et al. 2000)
<i>T. nobiliana</i>	NW	3	%IRI	Gadiformes	Present study
<i>T. torpedo</i>	C		%FO	Perciformes, Crustacea	Azouz and Capape (1971)
<i>T. torpedo</i>	E	177	%FO	Perciformes, Pleuronectiformes, Natantia, Clupeiformes	Abdelaziz (1994)
<i>T. torpedo</i>	NW	63	%N	Teleostei, Polychaeta, Cephalopoda	Jaramillo et al. (2011)
<i>T. torpedo</i>	C	565	%IRI	Perciformes, Cephalopoda	El Kamel-Moutalibi et al. (2013)

Table S6. Main prey group based on revision of available diet information from the western Mediterranean Sea (index of standardised diet (P(x)))

	Crustacean Amphipoda	Crustacean Anomura	Crustacean Brachyura	Crustacean Natantia	Unid. Crustacean	Mollusca Cephalopoda	Other Mollusca	Polychaeta	Selachii	Sipunculidae	Teleostei	Others	Unid. Crustacean
<i>P. glauca</i>						0.44					0.56		
<i>C. granulosus</i>				0.50		0.33					0.17		
<i>C. coelolepis</i>				0.1		0.85					0.05		
<i>D. licha</i>				0.08		0.08			0.33		0.50		
<i>H. griseus</i>				0.03		0.15			0.02		0.8		
<i>O. centrina</i>			0.14					0.6		0.19	0.07		
<i>S. acanthias</i>				0.27		0.28					0.45		
<i>S. rostratus</i>						1							
<i>G. altavela</i>											1		
<i>M. aquila</i>		0.04					0.64			0.11			0.21
<i>M. mobular</i>											0.44	0.56	
<i>D. oxyrinchus</i>				0.67		0.22						0.11	
<i>L. naevus</i>				0.67							0.33		
<i>R. asterias</i>			0.47	0.2		0.03					0.3		
<i>R. clavata</i>			0.09	0.28		0.13					0.34		0.15
<i>R. polystigma</i>	0.33		0.17	0.33							0.17		
<i>T.marmorata</i>						0.14					0.86		
<i>T. torpedo</i>				0.10		0.14		0.09			0.57		0.09

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