

## ANNEX XV

Abundance (n), biomass (kg) and discard rates in number (n/h) and weight (kg/h), **by season**, for each fish and cephalopod species discarded by crustacean trawl (CT) and fish trawl (FT). In bold are represented the 93 discarded fish and cephalopod species used for the statistical analysis.

*Bycatch and discards of commercial trawl fisheries in the South coast of Portugal*

Species	Métier	Season	ABUNDANCE	BIOMASS	DISCARD RATE		
			(n)	(kg)	(n/h)	(kg/h)	
<i>Abralia veranyi</i>	CT	Winter	119	0.252	1	0.003	
		Summer	1	0.003	0	0.000	
<i>Alepocephalidae</i> n.i.	CT	Winter	4	0.034	0	0.000	
<i>Alloteuthis media</i>	CT	Autumn	6	0.019	0	0.000	
	FT	Winter	692	2.130	15	0.047	
		Spring	106	0.408	7	0.025	
		Summer	95	0.309	2	0.007	
	Autumn	1952	6.074	110	0.338		
<i>Alloteuthis</i> spp.	FT	Autumn	773	1.341	39	0.069	
<i>Alloteuthis subulata</i>	CT	Winter	627	2.309	6	0.024	
		Spring	1	0.004	0	0.000	
		Autumn	116	0.394	2	0.008	
	FT	Winter	3903	18.215	101	0.468	
		Spring	310	1.613	18	0.096	
		Summer	714	3.409	14	0.062	
		Autumn	3646	14.676	177	0.715	
	<i>Alosa fallax</i>	FT	Summer	32	10.350	1	0.173
<i>Anthias anthias</i>	FT	Winter	500	14.673	5	0.124	
		Spring	65	2.736	1	0.059	
		Summer	24	0.967	1	0.048	
		Autumn	411	10.971	11	0.275	
<i>Argentina sphyraena</i>	FT	Spring	8	0.172	0	0.009	
Summer		3304	28.496	63	0.547		
<i>Argyropelecus aculeatus</i>	CT	Summer	1	0.002	0	0.000	
<i>Arnoglossus imperialis</i>	CT	Spring	7	0.225	0	0.002	
		Autumn	36	0.477	1	0.008	
	FT	Winter	3646	45.488	94	1.161	
		Spring	61	0.740	2	0.029	
		Summer	1115	25.431	17	0.349	
		Autumn	1299	17.717	67	0.887	
	<i>Arnoglossus laterna</i>	CT	Winter	6	0.360	0	0.002
			Autumn	4	0.074	0	0.001
FT		Winter	1691	18.348	47	0.515	
		Spring	28	0.205	1	0.010	
<i>Arnoglossus rueppelii</i>	CT	Summer	205	2.307	4	0.043	
		Autumn	763	8.318	35	0.375	
		Winter	290	2.828	3	0.029	
		Autumn	59	0.491	1	0.008	
	FT	Summer	2331	23.613	42	0.435	
<i>Arnoglossus</i> spp.	FT	Winter	426	4.984	12	0.145	
<i>Arnoglossus thori</i>	CT	Spring	2	0.027	0	0.000	
	FT	Winter	4478	40.316	122	1.102	
		Summer	187	3.574	3	0.057	
<i>Atherina presbyter</i>	FT	Autumn	1613	16.330	69	0.702	
<i>Balistes capriscus</i>	FT	Winter	260	1.758	8	0.053	
		Spring	54	8.110	4	0.541	
		Summer	254	223.347	5	4.284	

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			(n)	(kg)	(n/h)	(kg/h)		
<i>Belone belone</i>	CT	Spring	2	0.122	0	0.001		
<b><i>Benthodesmus elongatus</i></b>	CT	Winter	90	6.409	1	0.035		
		Spring	57	5.383	1	0.052		
		Summer	104	14.609	1	0.112		
		Autumn	1	0.163	0	0.002		
<i>Beryx decadactylus</i>	CT	Summer	4	1.597	0	0.011		
<i>Beryx splendens</i>	CT	Summer	10	1.310	0	0.013		
<i>Blennius ocellaris</i>	FT	Winter	40	0.903	1	0.014		
		Summer	274	2.925	5	0.058		
		Autumn	75	2.158	3	0.085		
<b><i>Boops boops</i></b>	CT	Spring	33	0.898	0	0.007		
	FT	Winter	12541	1429.828	342	39.338		
		Spring	887	65.521	48	3.505		
		Summer	7489	740.907	154	14.829		
		Autumn	3376	291.519	157	13.596		
<i>Callanthias ruber</i>	CT	Autumn	4	0.161	0	0.003		
<b><i>Callionymus lyra</i></b>	CT	Spring	1	0.041	0	0.000		
		Autumn	23	0.667	0	0.014		
	FT	Winter	395	22.890	10	0.583		
		Spring	288	18.336	18	1.142		
		Summer	828	46.814	15	0.936		
			Autumn	338	25.671	15	1.056	
	<b><i>Callionymus maculatus</i></b>	CT	Winter	10	0.049	0	0.000	
Spring			1	0.025	0	0.000		
Autumn			29	0.177	0	0.003		
FT		Winter	3691	24.010	91	0.587		
		Spring	20	0.218	1	0.015		
		Summer	268	2.511	6	0.045		
				Autumn	1126	8.003	54	0.382
<i>Callionymus spp.</i>	FT	Winter	440	0.880	11	0.023		
<b><i>Capros aper</i></b>	CT	Winter	17010	383.030	183	4.151		
		Spring	251	3.683	2	0.035		
		Summer	30	0.422	0	0.004		
		Autumn	902	9.281	16	0.173		
	FT	Winter	62005	953.414	1660	25.537		
		Spring	825	4.393	47	0.249		
		Summer	25763	428.110	433	6.388		
				Autumn	611	5.531	30	0.288
		CT	Winter	10	7.280	0	0.051	
			Spring	2	7.840	0	0.085	
<b><i>Centrophorus granulosus</i></b>	CT	Summer	3	12.696	0	0.093		
		FT	Winter	768	52.737	16	1.084	
			Spring	292	28.203	17	1.644	
		Summer	771	55.793	14	0.987		
		Autumn	340	19.789	14	0.765		

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			(n)	(kg)	(n/h)	(kg/h)
<i>Chaunax pictus</i>	CT	Winter	37	0.780	0	0.008
		Spring	6	0.761	0	0.006
		Summer	1	0.070	0	0.001
		Autumn	1	0.031	0	0.000
<i>Chelidonichthys cuculus</i>	FT	Winter	9580	221.005	259	5.954
		Autumn	29	0.946	1	0.047
<i>Chelidonichthys lucerna</i>	CT	Summer	88	21.770	1	0.148
	FT	Winter	576	13.675	16	0.360
		Summer	57	5.915	1	0.130
<i>Chelidonichthys obscurus</i>	CT	Spring	1	0.094	0	0.001
	FT	Winter	1551	123.321	43	3.443
		Spring	60	4.784	4	0.339
		Summer	13	1.725	0	0.029
		Autumn	388	28.362	18	1.384
<i>Chimaera monstrosa</i>	CT	Winter	83	34.756	0	0.159
		Spring	98	32.440	1	0.293
		Summer	83	17.707	1	0.130
		Autumn	328	174.698	8	4.135
<i>Chlorophthalmus agassizi</i>	CT	Winter	41	0.988	0	0.006
		Spring	46	1.268	0	0.011
		Summer	144	3.738	1	0.030
		Autumn	8	0.142	0	0.002
<i>Citharus linguatula</i>	CT	Winter	79	2.816	1	0.028
		Autumn	85	3.634	1	0.060
	FT	Winter	5098	124.181	133	3.228
		Spring	110	3.020	6	0.162
		Summer	1766	64.592	34	1.228
<i>Coelorinchus caelorinchus</i>	CT	Autumn	1837	52.003	87	2.454
		Winter	32	0.481	0	0.002
		Spring	27	0.566	0	0.005
		Summer	196	1.506	1	0.012
<i>Coelorinchus occa</i>	CT	Autumn	4	0.019	0	0.000
		Winter	10	0.306	0	0.001
		Summer	23	0.152	0	0.001
		Autumn	7	0.104	0	0.001
<i>Conger conger</i>	CT	Winter	2084	234.829	21	2.018
		Spring	411	69.521	4	0.608
		Summer	252	56.328	2	0.446
		Autumn	126	13.914	2	0.246
	FT	Winter	3246	323.689	87	8.659
		Spring	91	7.407	5	0.388
		Summer	736	56.991	15	1.084
		Autumn	162	15.062	8	0.772
<i>Cyttopsis rosea</i>	CT	Winter	10	0.075	0	0.001
		Summer	15	0.125	0	0.001
<i>Dalatias licha</i>	CT	Winter	17	26.798	0	0.122
		Spring	5	1.293	0	0.013
		Summer	3	10.548	0	0.078
		Autumn	8	23.968	0	0.379

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			(n)	(kg)	(n/h)	(kg/h)
<i>Deania calcea</i>	CT	Winter	355	31.387	2	0.179
		Spring	106	14.544	1	0.142
		Summer	375	38.461	3	0.283
		Autumn	3	0.608	0	0.006
<i>Deltentosteus quadrimaculatu.</i>	FT	Winter	107	0.492	3	0.013
		Autumn	288	1.207	14	0.059
<i>Dentex macrophthalmus</i>	FT	Autumn	47	2.188	2	0.087
<i>Dicologlossa cuneata</i>	CT	Winter	2	0.019	0	0.000
		Summer	2	0.059	0	0.001
	FT	Winter	109	6.499	3	0.149
		Summer	25	2.160	0	0.036
		Autumn	57	6.693	4	0.486
<i>Diplodus vulgaris</i>	CT	Spring	1	0.026	0	0.000
	FT	Winter	11	1.158	0	0.025
		Spring	5	0.247	0	0.018
		Summer	48	2.065	1	0.055
		Autumn	31	1.128	1	0.046
<i>Dipturus batis</i>	CT	Spring	7	0.106	0	0.001
<i>Dipturus oxyrinchus</i>	CT	Winter	58	9.907	0	0.053
		Spring	48	1.858	0	0.016
		Summer	30	5.684	0	0.041
<i>Dirtemus argenteus</i>	CT	Winter	5	0.041	0	0.000
<i>Echelus myrus</i>	CT	Winter	1	0.006	0	0.000
<i>Echiodon dentatus</i>	CT	Winter	1	0.002	0	0.000
<i>Eledone cirrhosa</i>	CT	Winter	263	44.581	3	0.416
		Spring	77	24.990	1	0.222
		Summer	13	5.023	0	0.036
		Autumn	9	0.653	0	0.011
	FT	Winter	9	1.121	0	0.017
		Summer	105	10.247	1	0.117
		Autumn	292	23.180	16	1.394
<i>Eledone moschata</i>	CT	Winter	74	8.673	1	0.069
		Summer	5	1.136	0	0.014
		Autumn	37	7.009	1	0.133
	FT	Winter	533	37.411	12	0.824
		Spring	128	7.001	9	0.463
		Summer	527	43.544	10	0.847
		Autumn	292	23.180	16	1.394
<i>Engraulis encrasicolus</i>	CT	Spring	1	0.009	0	0.000
		Autumn	9	0.225	0	0.004
	FT	Winter	556	11.556	13	0.258
		Spring	419	9.298	18	0.407
		Summer	773	16.610	16	0.339
		Autumn	114	3.216	5	0.145
<i>Epigonus denticulatus</i>	CT	Winter	18	0.199	0	0.001
		Spring	44	0.221	0	0.002
		Summer	4	0.090	0	0.001
<i>Epigonus telescopus</i>	CT	Summer	89	1.542	1	0.012

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			(n)	(kg)	(n/h)	(kg/h)
<i>Etmopterus pusillus</i>	CT	Winter	327	28.554	2	0.192
		Spring	678	49.095	6	0.417
		Summer	440	14.743	4	0.128
<i>Etmopterus spinax</i>	CT	Winter	451	48.197	3	0.293
		Spring	1530	45.614	13	0.415
		Summer	902	53.129	7	0.424
		Autumn	24	3.618	0	0.035
<i>Eutrigla gurnardus</i>	FT	Winter	148	2.030	4	0.057
<i>Facciolella oxyrhyncha</i>	CT	Spring	85	0.944	1	0.008
<i>Gadella maraldi</i>	CT	Spring	10	0.110	0	0.001
<i>Gadiculus a. argenteus</i>	CT	Winter	2427	21.134	23	0.196
		Spring	633	7.176	6	0.062
		Summer	86	1.022	1	0.008
		Autumn	495	4.314	10	0.088
	FT	Winter	1388	7.127	37	0.191
<i>Gaidropsaurus biscayensis</i>	CT	Summer	182	1.153	4	0.023
		Winter	87	0.828	0	0.004
		Spring	34	0.402	0	0.004
		Summer	470	4.928	4	0.038
	Autumn	12	0.157	0	0.002	
<i>Gaidropsaurus vulgaris</i>	CT	Winter	13	0.093	0	0.000
		Spring	13	0.042	0	0.000
<i>Galeus melastomus</i>	CT	Winter	1407	167.274	8	0.875
		Spring	3929	84.485	35	0.787
		Summer	3762	181.031	30	1.480
		Autumn	256	18.628	3	0.183
<i>Halobatrachus didactylus</i>	CT	Spring	2	0.236	0	0.002
		Summer	8	1.049	0	0.007
<i>Helicolenus dactylopterus</i>	CT	Winter	347	16.545	3	0.131
		Spring	213	12.948	2	0.110
		Summer	197	17.836	1	0.136
		Autumn	71	0.903	1	0.014
	FT	Winter	2964	207.175	82	5.798
		Spring	15	0.671	1	0.026
		Summer	781	29.132	13	0.491
<i>Hexanchus griseus</i>	CT	Summer	3	34.971	0	0.259
<i>Hoplostethus m. mediterraneu</i>	CT	Winter	1089	29.377	6	0.152
		Spring	182	2.160	2	0.021
		Summer	2786	36.441	25	0.314
		Autumn	174	1.274	3	0.017
<i>Hymenocephalus gracilis</i>	CT	Winter	9	0.033	0	0.000
<i>Hymenocephalus italicus</i>	CT	Winter	71	0.205	0	0.001
<i>Illex coindetii</i>	CT	Winter	703	121.564	5	0.745
		Spring	126	24.477	1	0.223
		Summer	80	18.417	1	0.144
		Autumn	113	4.950	2	0.075

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			(n)	(kg)	(n/h)	(kg/h)	
<i>Illex coindetii</i>	FT	Winter	2148	76.504	55	1.928	
		Spring	169	12.773	11	0.820	
		Summer	461	79.002	8	1.565	
		Autumn	234	26.624	11	1.139	
<i>Lepidopus caudatus</i>	CT	Winter	1717	38.880	17	0.318	
		Spring	247	16.778	2	0.146	
		Summer	153	31.955	1	0.265	
		Autumn	132	10.645	2	0.158	
	FT	Winter	154	4.542	2	0.070	
		Spring	1664	35.122	85	1.908	
		Summer	4921	312.756	90	5.874	
		Autumn	68	0.864	4	0.055	
<i>Lepidorhombus boscii</i>	CT	Summer	12	1.135	0	0.008	
<i>Lepidorhombus whiffiagonis</i>	CT	Winter	3	1.173	0	0.005	
		Spring	7	0.613	0	0.005	
<i>Lepidotrigla cavillone</i>	CT	Winter	22	0.181	0	0.002	
	FT	Winter	1273	19.833	33	0.563	
		Spring	2651	81.617	171	5.261	
		Summer	1361	35.483	32	0.852	
<i>Lepidotrigla dieuzeidei</i>	FT	Autumn	9941	308.650	497	15.284	
		Winter	662	8.628	15	0.197	
		Spring	435	13.567	25	0.769	
		Summer	133	3.078	3	0.066	
<i>Lesueurigobius sanzi</i>	FT	Autumn	4554	119.057	200	5.259	
		Winter	4637	47.253	126	1.293	
		Spring	95	1.484	5	0.085	
		Summer	250	3.296	4	0.056	
<i>Leucoraja naevus</i>	CT	Autumn	212	2.788	9	0.115	
		Winter	2	0.010	0	0.000	
		FT	Winter	578	250.154	16	7.127
<i>Loligo vulgaris</i>	CT	Summer	464	95.658	7	1.544	
		Spring	2	0.045	0	0.000	
		FT	Winter	35	2.537	1	0.077
			Spring	17	0.522	1	0.026
<i>Lophius budegassa</i>	CT	Summer	775	16.739	15	0.321	
		Autumn	192	4.238	12	0.220	
		Winter	8	0.800	0	0.003	
	FT	Summer	15	5.979	0	0.041	
		Winter	155	18.570	4	0.440	
		Summer	27	1.156	1	0.025	
<i>Lophius piscatorius</i>	CT	Autumn	5	0.846	0	0.033	
		Winter	3	0.819	0	0.006	
		FT	Winter	12	1.692	0	0.043
			Spring	54	0.885	3	0.048
		Summer	158	31.992	2	0.357	

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<i>Macroramphosus gracilis</i>	CT	Winter	24	7.764	0	0.085
		Summer	7	0.052	0	0.000
		Autumn	66	1.782	1	0.030
	FT	Winter	32291	414.959	800	9.732
		Spring	570	4.798	28	0.228
		Summer	73601	809.391	1459	15.999
<i>Macroramphosus scolopax</i>	CT	Autumn	12	0.167	1	0.008
		Winter	23354	247.501	245	2.595
		Summer	96	0.885	1	0.008
	FT	Autumn	189	2.990	4	0.056
		Winter	189254	1761.201	5080	46.348
		Spring	762	7.749	42	0.406
<i>Malacocephalus laevis</i>	CT	Summer	182519	2115.239	3885	44.080
		Autumn	326	3.269	15	0.149
		Winter	653	32.749	5	0.220
	FT	Spring	99	6.574	1	0.059
		Summer	170	19.470	1	0.148
		Autumn	110	3.338	2	0.048
<i>Merluccius merluccius</i>	CT	Winter	15	0.586	0	0.010
		Spring	4321	140.707	43	1.353
		Summer	172	18.104	1	0.142
	FT	Autumn	9	1.400	0	0.012
		Winter	226	4.167	4	0.071
		Spring	25042	623.066	669	16.632
<i>Microchirus azevia</i>	CT	Summer	443	9.687	21	0.508
		Autumn	2369	141.623	42	2.248
		Winter	5263	130.175	251	5.918
	FT	Spring	21	0.272	0	0.002
		Summer	38	0.578	0	0.006
		Autumn	223	2.600	2	0.018
<i>Microchirus boscanion</i>	FT	Winter	9429	163.536	264	4.584
		Summer	505	9.569	11	0.216
		Autumn	620	10.787	27	0.478
<i>Microchirus ocellatus</i>	FT	Winter	173	5.876	5	0.160
		Autumn	8	0.316	1	0.020
<i>Microchirus variegatus</i>	CT	Autumn	9	0.429	0	0.007
	FT	Winter	4148	157.801	106	3.986
		Spring	56	1.352	3	0.064
		Summer	2386	67.504	52	1.449
<i>Micromesistius poutassou</i>	CT	Autumn	394	10.707	20	0.540
		Winter	11937	609.364	130	6.508
		Spring	2008	282.038	18	2.574
	FT	Summer	4582	453.003	40	3.838
		Autumn	8441	268.831	143	4.515
		Winter	16384	752.114	435	20.043
	FT	Spring	34	0.923	2	0.058
		Summer	20239	517.700	326	8.139
		Autumn	386	14.439	15	0.555

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			(n)	(kg)	(n/h)	(kg/h)
<i>Mola mola</i>	FT	Autumn	2	0.006	0	0.000
<i>Molva molva</i>	CT	Spring	3	0.049	0	0.000
<b><i>Mora moro</i></b>	CT	Winter	141	3.613	2	0.041
		Spring	191	1.356	2	0.013
		Summer	407	6.268	3	0.049
	FT	Autumn	3	0.156	0	0.002
		Spring	4	0.040	0	0.003
<i>Mullus surmuletus</i>	CT	Winter	3	0.356	0	0.002
	FT	Summer	21	2.029	1	0.054
		Autumn	5	1.049	0	0.072
<b><i>Myctophidae n.i.</i></b>	CT	Winter	82	0.808	1	0.005
		Spring	98	0.160	1	0.001
		Summer	67	0.165	0	0.001
	FT	Winter	74	0.264	2	0.008
		Summer	23	0.031	0	0.001
<i>Nemichthys scolopaceus</i>	CT	Summer	6	0.023	0	0.000
<i>Neoraja iberica n.sp.</i>	CT	Spring	20	0.880	0	0.008
<b><i>Neorossia caroli</i></b>	CT	Winter	98	3.507	1	0.019
		Spring	35	1.568	0	0.018
		Summer	50	1.355	0	0.011
		Autumn	4	0.163	0	0.002
<b><i>Nezumia sclerorhynchus</i></b>	CT	Winter	2481	27.349	17	0.165
		Spring	4533	98.207	44	0.990
		Summer	2705	46.980	22	0.360
		Autumn	71	0.731	1	0.011
<b><i>Notacanthus chemnitzii</i></b>	CT	Winter	35	1.406	0	0.008
		Spring	137	2.678	1	0.022
		Summer	5	0.103	0	0.001
<b><i>Octopus salutii</i></b>	CT	Winter	30	5.713	0	0.034
		Spring	15	4.945	0	0.048
<b><i>Octopus vulgaris</i></b>	FT	Summer	32	2.889	1	0.044
		Winter	71	9.116	2	0.203
		Summer	135	10.630	2	0.121
<b><i>Pagellus acarne</i></b>	CT	Autumn	274	34.594	11	1.308
		Winter	5	0.005	0	0.000
		Spring	25	1.929	0	0.018
		Summer	6	1.431	0	0.011
	FT	Autumn	1	0.023	0	0.000
Winter		578	34.740	16	0.990	
Spring		120	7.910	7	0.463	
<b><i>Pagellus bogaraveo</i></b>	FT	Summer	927	95.729	18	1.884
		Autumn	4052	175.845	178	7.756
		Autumn	2	0.078	0	0.003
		Spring	1	0.007	0	0.000
<i>Pagellus erythrinus</i>	CT	Spring	1	0.007	0	0.000
<i>Peristedion cataphractum</i>	FT	Summer	192	1.221	2	0.013
<b><i>Phycis blennoides</i></b>	CT	Winter	261	25.020	2	0.169
		Spring	249	31.794	2	0.287
		Summer	255	32.523	2	0.259
		Autumn	86	2.420	1	0.041

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Species	Métier	Season	ABUNDANCE	BIOMASS	DISCARD RATE	
			(n)	(kg)	(n/h)	(kg/h)
<i>Phycis phycis</i>	CT	Winter	3	0.027	0	0.000
		Spring	30	5.561	0	0.047
<i>Polymetme corythaeola</i>	CT	Winter	128	1.937	1	0.012
		Spring	47	1.079	0	0.009
		Summer	26	0.453	0	0.003
		Autumn	2	0.029	0	0.000
<i>Pontinus kuhlii</i>	FT	Winter	578	78.903	16	2.248
<i>Pteroctopus tetracirrhus</i>	CT	Summer	1	0.078	0	0.001
<i>Raja asterias</i>	FT	Winter	1	0.941	0	0.094
		Summer	6	2.062	0	0.025
<i>Raja clavata</i>	CT	Winter	22	5.977	0	0.068
		Spring	23	3.117	0	0.029
		Summer	39	6.210	0	0.048
		Autumn	7	1.005	0	0.019
	FT	Winter	105	81.714	3	2.018
		Spring	82	5.813	4	0.249
		Summer	582	67.012	10	1.169
		Autumn	189	18.453	10	0.947
<i>Raja miraletus</i>	FT	Winter	5	0.974	0	0.021
		Spring	35	3.177	2	0.155
		Summer	18	1.873	0	0.023
		Autumn	33	3.372	1	0.146
<i>Raja montagui</i>	CT	Spring	7	0.070	0	0.000
		Summer	11	0.426	0	0.003
	FT	Summer	487	25.004	5	0.266
<i>Raja undulata</i>	CT	Summer	15	4.695	0	0.031
	FT	Winter	107	76.663	3	2.028
<i>Rossia macrosoma</i>	CT	Winter	60	4.050	1	0.045
		Spring	30	1.869	0	0.016
		Summer	11	0.921	0	0.007
		Autumn	20	1.329	0	0.027
	FT	Winter	1164	59.238	32	1.627
<i>Ruvettus pretiosus</i>	CT	Spring	14	0.135	1	0.007
		Summer	6	5.632	0	0.067
	FT	Summer	10	16.176	0	0.125
<i>Sardina pilchardus</i>	CT	Spring	10	0.414	0	0.003
	FT	Winter	12767	584.208	385	17.645
		Spring	999	44.820	57	2.569
		Summer	1957	114.221	35	2.043
<i>Scaevurgus unicirrhus</i>	CT	Autumn	5049	288.429	230	13.143
		Winter	79	4.447	1	0.050
	FT	Winter	935	54.708	24	1.401
		Summer	106	4.863	2	0.109
<i>Scomber colias</i>	CT	Spring	1	0.104	0	0.001
	FT	Winter	36611	4714.347	1028	131.442
		Spring	497	67.600	29	3.830
		Summer	1074	129.491	25	2.960
		Autumn	1816	251.574	81	11.163

*Bycatch and discards of commercial trawl fisheries in the South coast of Portugal*

Species	Métier	Season	ABUNDANCE	BIOMASS	DISCARD RATE	
			(n)	(kg)	(n/h)	(kg/h)
<i>Scomber scombrus</i>	CT	Autumn	38	2.842	1	0.048
	FT	Winter	4206	328.688	101	7.805
		Spring	1158	173.019	78	11.656
		Summer	1363	275.665	27	5.411
		Autumn	6095	570.173	313	28.451
<i>Scophthalmus rhombus</i>	CT	Spring	8	1.413	0	0.012
<i>Scorpaena elongata</i>	CT	Autumn	4	0.014	0	0.000
	FT	Summer	111	10.907	1	0.127
<i>Scorpaena notata</i>	CT	Autumn	10	0.324	1	0.017
		Winter	117	1.762	1	0.018
		Spring	8	0.158	0	0.002
	FT	Autumn	4	0.195	0	0.003
		Winter	4179	227.031	112	6.137
		Spring	763	38.296	42	2.105
		Summer	1515	83.443	28	1.626
<i>Scyliorhinus canicula</i>	CT	Autumn	1176	45.040	54	2.017
		Winter	396	24.243	4	0.234
		Spring	733	133.549	7	1.214
		Summer	61	15.562	0	0.118
	FT	Autumn	83	2.137	2	0.043
		Winter	24669	4086.126	662	109.699
		Spring	40	5.200	2	0.316
		Summer	4084	548.664	57	7.803
<i>Scymnodon ringens</i>	CT	Autumn	464	63.434	15	1.930
		Winter	6	5.912	0	0.041
		Spring	1	2.615	0	0.029
		Summer	7	1.817	0	0.013
<i>Sepia elegans</i>	CT	Winter	76	0.675	1	0.007
		Autumn	88	0.959	1	0.017
	FT	Winter	2201	18.046	59	0.480
		Spring	83	1.073	5	0.067
		Summer	331	3.952	7	0.085
<i>Sepia officinalis</i>	FT	Autumn	1461	14.418	73	0.733
		Winter	47	0.791	1	0.019
		Autumn	81	2.430	3	0.097
<i>Sepia orbignyana</i>	CT	Winter	25	0.935	0	0.011
		Spring	40	0.704	0	0.006
		Autumn	81	2.111	2	0.043
	FT	Winter	2251	55.975	61	1.530
		Summer	870	26.305	18	0.539
<i>Sepietta obscura</i>	FT	Autumn	133	0.183	7	0.009
<i>Sepietta oweniana</i>	CT	Winter	119	0.225	1	0.002
		Spring	19	0.070	0	0.001
		Summer	29	0.128	0	0.001
		Autumn	17	0.074	0	0.002
	FT	Spring	54	0.243	4	0.016
		Summer	63	0.361	1	0.005
		Autumn	140	0.340	7	0.017

*Bycatch and discards of commercial trawl fisheries in the South coast of Portugal*

Species	Métier	Season	ABUNDANCE BIOMASS		DISCARD RATE		
			(n)	(kg)	(n/h)	(kg/h)	
<i>Sepiola atlantica</i>	FT	Autumn	44	0.200	2	0.010	
<i>Serranus cabrilla</i>	FT	Winter	490	39.393	12	1.002	
		Summer	29	2.486	1	0.060	
		Autumn	77	4.436	3	0.197	
<i>Serranus hepatus</i>	CT	Winter	67	1.910	1	0.021	
		Spring	1	0.038	0	0.000	
		Summer	42	0.339	0	0.003	
		Autumn	9	0.208	0	0.004	
	FT	Winter	34824	842.455	905	21.910	
		Spring	894	25.734	50	1.428	
		Summer	9380	243.718	201	5.222	
		Autumn	6723	174.813	296	7.733	
	<i>Setarches guentheri</i>	CT	Spring	2	0.052	0	0.001
			Summer	21	3.124	0	0.023
<i>Sphoeroides pachygaster</i>	CT	Summer	175	38.089	1	0.259	
<i>Spicara maena</i>	CT	Spring	4	0.090	0	0.001	
<i>Spondyliosoma cantharus</i>	CT	Spring	3	0.125	0	0.001	
	FT	Winter	44	4.908	2	0.191	
		Spring	292	31.977	19	2.059	
		Summer	121	14.442	2	0.275	
		Autumn	449	45.120	20	1.986	
<i>Stomias boa boa</i>	CT	Winter	3	0.014	0	0.000	
		Summer	27	0.192	0	0.001	
<i>Symphurus ligulatus</i>	CT	Winter	1791	18.977	18	0.194	
		Spring	20	0.191	0	0.001	
		Summer	16	0.060	0	0.000	
		Autumn	37	0.244	1	0.005	
	FT	Winter	45	0.874	1	0.015	
		Summer	10	0.135	0	0.002	
		Autumn	45	0.214	0	0.001	
<i>Symphurus nigrescens</i>	CT	Winter	45	0.214	0	0.001	
<i>Synaphobranchus kaupii</i>	CT	Winter	439	4.538	4	0.045	
		Spring	352	2.618	3	0.022	
		Summer	219	1.388	2	0.012	
		Autumn	26	0.085	1	0.002	
<i>Synchiropus phaeton</i>	CT	Winter	140	0.762	1	0.008	
		Spring	4	0.038	0	0.000	
	FT	Summer	254	3.705	5	0.071	
<i>Todarodes sagittatus</i>	CT	Summer	4	3.143	0	0.026	
<i>Todaropsis eblanae</i>	CT	Winter	325	30.439	2	0.186	
		Spring	12	1.443	0	0.013	
		Summer	3	0.580	0	0.004	
		Autumn	35	0.694	0	0.009	
	FT	Winter	4	0.267	0	0.014	
		Spring	53	2.849	4	0.219	
		Summer	108	17.789	1	0.193	
		Autumn	159	5.298	8	0.316	
		Autumn	4	1.220	0	0.128	
<i>Torpedo marmorata</i>	CT	Winter	2	3.699	0	0.023	
	FT	Winter	45	2.148	1	0.037	
		Summer	12	2.168	0	0.026	
		Autumn	4	1.220	0	0.128	

*Bycatch and discards of commercial trawl fisheries in the South coast of Portugal*

Species	Métier	Season	ABUNDANCE BIOMASS		DISCARD RATE	
			(n)	(kg)	(n/h)	(kg/h)
<i>Torpedo nobiliana</i>	CT	Spring	4	1.433	0	0.012
		Summer	16	99.649	0	0.741
		Autumn	328	119.203	8	2.821
<i>Trachinus draco</i>	CT	Spring	3	0.188	0	0.001
	FT	Winter	222	9.099	6	0.247
		Summer	16	2.056	0	0.023
<i>Trachurus mediterraneus</i>	FT	Autumn	86	11.514	3	0.459
		Spring	66	1.961	3	0.090
		Summer	769	96.331	15	1.896
<i>Trachurus picturatus</i>	CT	Winter	34	6.575	0	0.027
		Spring	13	2.836	0	0.027
	FT	Winter	4018	450.234	113	12.564
		Summer	212	9.450	5	0.220
<i>Trachurus trachurus</i>	CT	Autumn	276	20.373	12	0.914
		Winter	243	42.787	2	0.227
		Spring	16	2.556	0	0.019
	FT	Winter	1786	184.203	48	5.174
		Spring	363	14.606	20	0.774
<i>Trachyrinchus scabrus</i>	CT	Summer	182	13.058	4	0.290
		Autumn	1120	45.118	54	2.236
<i>Trigla lyra</i>	CT	Winter	5	0.062	0	0.000
	CT	Autumn	13	0.004	0	0.000
		FT	Winter	749	20.394	20
	<i>Trigloporus lastoviza</i>	CT	Summer	201	0.332	2
Spring			2	0.131	0	0.001
Summer			88	11.025	1	0.075
FT		Autumn	4	0.928	0	0.016
		Winter	78	5.563	3	0.165
		Spring	277	7.442	19	0.498
<i>Venefica proboscidea</i>	CT	Summer	385	10.994	5	0.162
		Autumn	50	1.430	2	0.069
		Winter	615	9.392	6	0.084
		Spring	176	2.518	2	0.022
		Summer	140	1.746	1	0.015
<i>Zenopsis conchifera</i>	FT	Autumn	160	3.763	3	0.059
<i>Zeus faber</i>	FT	Summer	17	0.358	0	0.006
		Winter	1977	74.687	56	2.129
		Spring	30	1.669	2	0.086
		Summer	392	61.747	7	0.941
		Autumn	20	1.019	1	0.035