



East & South Chatham Rise ORH fishery (UoC): QMS (retained) species

All commercial tows	2,251	1,659	715	869	942
All obs tows	920	657	85	145	136
Percentage of tows observed	40.9%	39.6%	11.9%	16.7%	14.4%

Species	2008/09			2009/10			2010/11			2011/12			2013/14			Scaled up total 5 yr catch	% total catch	Average annual catch
	kg	%	tonnes	kg	%	tonnes	kg	%	tonnes	kg	%	tonnes	kg	%	tonnes			
Units	kg	%	tonnes	kg	%	tonnes	kg	%	tonnes	kg	%	tonnes	kg	%	tonnes	tonnes	%	tonnes
Smooth oreo	2,483,634	54.8%	6,076.8	2,320,203	52.1%	5,858.8	505,133	70.5%	4,249.1	1,024,644	84.0%	6,140.8	872,673	62.3%	6,044.5	28,370.0	62.5%	5,674.0
Orange roughy	1,466,474	32.4%	3,588.1	1,412,364	31.7%	3,566.4	170,826	23.8%	1,436.9	108,945	8.9%	652.9	471,983	33.7%	3,269.2	12,513.5	27.6%	2,502.7
Black oreo	257,535	5.7%	630.1	390,194	8.8%	985.3	13,373	1.9%	112.5	37,628	3.1%	225.5	24,505	1.7%	169.7	2,123.1	4.7%	424.6
Hoki	45,747	1.0%	111.9	63,331	1.4%	159.9	3,971	0.6%	33.4	9,046	0.7%	54.2	1,678	0.1%	11.6	371.1	0.8%	74.2
Ribaldo	510	0.0%	1.2	1,074	0.0%	2.7	18	0.0%	0.2	27	0.0%	0.2	6,459	0.5%	44.7	49.0	0.1%	9.8
Cardinal fish	8,604	0.2%	21.1	1,455	0.0%	3.7	65	0.0%	0.5	232	0.0%	1.4	1,818	0.1%	12.6	39.3	0.1%	7.9
Pale ghost shark	794	0.0%	1.9	1,614	0.0%	4.1	39	0.0%	0.3	86	0.0%	0.5	49	0.0%	0.3	7.2	0.0%	1.4
Hake	143	0.0%	0.3	483	0.0%	1.2	54	0.0%	0.5	51	0.0%	0.3	317	0.0%	2.2	4.5	0.0%	0.9
Alfonsino	554	0.0%	1.4	161	0.0%	0.4		0.0%	0.0	166	0.0%	1.0	5	0.0%	0.0	2.8	0.0%	0.6
Smooth skate	9	0.0%	0.0	768	0.0%	1.9		0.0%	0.0		0.0%	0.0	20	0.0%	0.1	2.1	0.0%	0.4
King crab		0.0%	0.0	335	0.0%	0.8		0.0%	0.0		0.0%	0.0	2	0.0%	0.0	0.9	0.0%	0.2
Sea perch	11	0.0%	0.0	233	0.0%	0.6	1	0.0%	0.0		0.0%	0.0	17	0.0%	0.1	0.7	0.0%	0.1
Moonfish	215	0.0%	0.5		0.0%	0.0		0.0%	0.0	30	0.0%	0.2		0.0%	0.0	0.7	0.0%	0.1
White warehou	15	0.0%	0.0	131	0.0%	0.3		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.4	0.0%	0.1
Spiky oreo		0.0%	0.0		0.0%	0.0		0.0%	0.0	60	0.0%	0.4		0.0%	0.0	0.4	0.0%	0.1
Ghost shark	78	0.0%	0.2	11	0.0%	0.0		0.0%	0.0	10	0.0%	0.1		0.0%	0.0	0.3	0.0%	0.1
Ling	3	0.0%	0.0	64	0.0%	0.2		0.0%	0.0		0.0%	0.0	4	0.0%	0.0	0.2	0.0%	0.0
Silver warehou		0.0%	0.0		0.0%	0.0		0.0%	0.0	28	0.0%	0.2		0.0%	0.0	0.2	0.0%	0.0
Bluenose	13	0.0%	0.0	25	0.0%	0.1		0.0%	0.0	4	0.0%	0.0		0.0%	0.0	0.1	0.0%	0.0
Arrow squid	11	0.0%	0.0	28	0.0%	0.1		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.1	0.0%	0.0
Ray's bream	6	0.0%	0.0	7	0.0%	0.0	2	0.0%	0.0	3	0.0%	0.0		0.0%	0.0	0.1	0.0%	0.0
Rough skate		0.0%	0.0	25	0.0%	0.1		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.1	0.0%	0.0
Lookdown dory	3	0.0%	0.0	10	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Spiny dogfish	13	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Flatfish		0.0%	0.0	3	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
NZ Southern arrow squid	3	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Grand Total	4,264,375	94.1%	10,433.8	4,192,519	94.1%	10,586.6	693,482	96.8%	5,833.4	1,180,960	96.9%	7,077.6	1,379,537	98.4%	9,555.3	43,486.7	95.8%	8,697.3
ALL SPECIES TOTAL	4,532,932	100.0%	11,090.9	4,455,394	100.0%	11,250.4	716,671	100.0%	6,028.5	1,219,241	100.0%	7,307.0	1,401,708	100.0%	9,708.9	45,385.7	100.0%	9,077.1

Smooth oreo (SSO)	2,479,744		2,227,679		505,133		1,024,644		872,670
Black oreo (BOE)	257,132		374,634		13,373		37,628		24,505
Proportion smooth	0.9060		0.8560		0.9742		0.9646		0.9727
Smooth & black combined (OEO)	4,293		108,084		0		0		3
SSO estimated	3,890		92,524		0.0		0.0		2.9
BOE assumption	403		15,560		0.0		0.0		0.1

Table ordered by 5-yr average annual catch x% = Where 5-year annual %age catch exceeds 5% for the species.

East & South Chatham Rise ORH fishery (UoC): non-QMS (bycatch) species

All commercial tows	2,251	1,659	715	869	942
All obs tows	920	657	85	145	136
Percentage of tows observed	40.9%	39.6%	11.9%	16.7%	14.4%

Species	2008/09		2009/10		2010/11		2011/12		2013/14		Scaled up total 5 yr catch (t)	% total catch	Average annual catch (t)					
	kg	%	kg	%	kg	%	kg	%	kg	%								
Units	kg	%	kg	%	kg	%	kg	%	kg	%	tonnes	%	tonnes					
Baxter's lantern dogfish	60,359	1.3%	14,727	56.258	1.3%	14,211	4,604	0.6%	38.7	15,840	1.3%	94.9	2,656	1.0%	88.4			
Deepwater dogfish (Unspecified)	50,708	1.1%	12,411	15,773	0.4%	39.8	0.0%	0.0	2,336	0.2%	14.0	270	0.0%	1.9	179.8	0.4%	36.0	
Other sharks & dogfish*	570	0.0%	1.4	25,642	0.6%	64.7	9,900	1.4%	83.3	1,694	0.1%	10.2	1,940	0.1%	13.4	173.0	0.4%	34.6
Skiadochelys	25,679	0.6%	0.0	35,513	0.6%	72.0	389	0.1%	3.3	2,173	0.2%	13.6	3,025	0.2%	21.0	172.1	0.4%	34.4
Morids	17,444	0.4%	42.7	34,491	0.8%	87.1	775	0.1%	6.5	2,357	0.2%	14.1	832	0.1%	5.8	156.2	0.3%	31.2
Rattails	24,927	0.5%	61.0	24,290	0.5%	61.3	343	0.0%	2.9	1,537	0.1%	9.2	1,913	0.1%	13.3	147.7	0.3%	29.5
Shovelnose dogfish	14,638	0.3%	35.8	26,053	0.6%	65.8	303	0.0%	2.5	711	0.1%	4.3	2,153	0.2%	14.9	123.3	0.3%	24.7
Seal shark	18,973	0.4%	46.4	2,590	0.1%	6.5	105	0.0%	0.9	5,143	0.4%	30.8	340	0.0%	2.4	87.0	0.2%	17.4
Johnson's cod	2,099	0.0%	5.1	12,135	0.3%	30.6	2,929	0.4%	24.6	1,417	0.1%	8.5	1,817	0.1%	12.6	81.5	0.2%	15.3
Warty squid	11,754	0.3%	28.8	3,996	0.1%	10.1	736	0.1%	6.2	791	0.1%	4.7	665	0.0%	4.6	54.4	0.1%	10.9
Basketwork eel	6,052	0.1%	14.8	6,482	0.1%	16.4	470	0.1%	4.0	1,748	0.1%	10.5	915	0.1%	6.3	51.9	0.1%	10.4
Spiny oreo	8,866	0.2%	16.8	2,121	0.0%	5.4	265	0.0%	2.2	979	0.1%	5.9	2,068	0.1%	14.3	44.6	0.1%	8.9
Long-nosed chinamoa	4,215	0.1%	10.3	8,167	0.2%	20.6	8	0.0%	0.1	150	0.0%	0.9	199	0.0%	1.4	33.3	0.1%	6.7
Violet cod	11,297	0.2%	27.6	1,448	0.0%	3.7	12	0.0%	0.1	7	0.0%	0.0	0	0.0%	0.0	31.4	0.1%	6.3
Longnose velvet dogfish	4,300	0.1%	10.5	3,001	0.1%	7.6	219	0.0%	1.8	162	0.0%	1.0	88	0.0%	0.6	21.5	0.0%	4.3
Cookiecutter shark	0	0.0%	0.0	0	0.0%	0.0	1,664	0.2%	14.0	0	0.0%	0.0	0	0.0%	0.0	14.0	0.0%	2.8
Plumlet's shark	3,621	0.1%	8.9	1,024	0.0%	2.6	12	0.0%	0.1	159	0.0%	1.0	12	0.0%	0.1	12.6	0.0%	2.5
Leafscale gulper shark	692	0.0%	1.7	998	0.0%	2.5	72	0.0%	0.6	292	0.0%	1.7	477	0.0%	3.3	9.9	0.0%	2.0
Jawelinfish	345	0.0%	0.8	1,099	0.0%	2.8	12	0.0%	0.1	35	0.0%	0.2	133	0.0%	0.9	4.9	0.0%	1.0
Cat shark	110	0.0%	0.3	1,743	0.0%	4.4	0	0.0%	0.0	28	0.0%	0.2	0	0.0%	0.0	4.8	0.0%	1.0
Chimaera spp.	146	0.0%	0.4	28	0.0%	0.1	17	0.0%	0.1	8	0.0%	0.0	288	0.0%	2.0	2.6	0.0%	0.5
Warty oreo	314	0.0%	0.8	664	0.0%	1.7	0	0.0%	0.0	8	0.0%	0.0	4	0.0%	0.0	4	0.0%	0.5
Black sickhead	0	0.0%	0.0	10	0.0%	0.0	289	0.0%	2.4	0	0.0%	0.0	0	0.0%	0.0	2.5	0.0%	0.5
Toadfish	150	0.0%	0.4	706	0.0%	1.8	1	0.0%	0.0	18	0.0%	0.1	23	0.0%	0.2	2.4	0.0%	0.5
Smooth skin dogfish	221	0.0%	0.5	543	0.0%	1.4	16	0.0%	0.1	0	0.0%	0.0	43	0.0%	0.3	2.3	0.0%	0.5
Giant sepioid	0	0.0%	0.0	112	0.0%	0.3	0	0.0%	0.0	0	0.0%	0.0	286	0.0%	2.0	2.3	0.0%	0.5
Brodie's king crab	391	0.0%	1.0	400	0.0%	1.0	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	2.0	0.0%	0.4
Longnosed deepsea skate	67	0.0%	0.2	687	0.0%	1.7	2	0.0%	0.0	0	0.0%	0.0	6	0.0%	0.0	2.0	0.0%	0.4
Roughskin dogfish	0	0.0%	0.0	595	0.0%	1.5	14	0.0%	0.1	0	0.0%	0.0	0	0.0%	0.0	1.6	0.0%	0.3
Black jawelinfish	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	253	0.0%	1.5	0	0.0%	0.0	1.5	0.0%	0.3
Purple chinamoa	0	0.0%	0.0	116	0.0%	0.3	0	0.0%	0.0	128	0.0%	0.8	64	0.0%	0.4	1.5	0.0%	0.3
Deepwater spiny skate	12	0.0%	0.0	202	0.0%	0.5	0	0.0%	0.0	52	0.0%	0.3	34	0.0%	0.2	1.1	0.0%	0.2
Chimaera, purple	102	0.0%	0.2	274	0.0%	0.7	2	0.0%	0.0	19	0.0%	0.1	0	0.0%	0.0	1.1	0.0%	0.2
Cardinal fish, robust	2	0.0%	0.0	329	0.0%	0.8	2	0.0%	0.0	9	0.0%	0.1	9	0.0%	0.1	1.0	0.0%	0.2
White rattail	350	0.0%	0.9	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	0.9	0.0%	0.2
Portuguese dogfish	75	0.0%	0.2	265	0.0%	0.7	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	0.9	0.0%	0.2
Cardinal fish, bigeye	120	0.0%	0.3	203	0.0%	0.5	1	0.0%	0.0	5	0.0%	0.0	0	0.0%	0.0	0.8	0.0%	0.2
Witch	75	0.0%	0.2	246	0.0%	0.6	0	0.0%	0.0	1	0.0%	0.0	1	0.0%	0.0	0.8	0.0%	0.2
Rough shovelnose dogfish	0	0.0%	0.0	319	0.0%	0.8	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	0.8	0.0%	0.2
Jellyfish (Unspecified)	280	0.0%	0.7	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	0.7	0.0%	0.1
Scaleless black dragonfishes	3	0.0%	0.0	246	0.0%	0.6	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	0.6	0.0%	0.1
Todarodes filippovae	199	0.0%	0.5	32	0.0%	0.1	6	0.0%	0.1	0	0.0%	0.0	1	0.0%	0.0	0.6	0.0%	0.1
Etmopterus spp.	250	0.0%	0.6	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	0.6	0.0%	0.1
Cod (Unspecified)	0	0.0%	0.0	214	0.0%	0.5	3	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	0.6	0.0%	0.1
Rudolf fish	57	0.0%	0.1	143	0.0%	0.4	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	0.4	0.0%	0.1
Bigscaled brown sickhead	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	36	0.0%	0.2	35	0.0%	0.2	0.5	0.0%	0.1
Lucifer dogfish	180	0.0%	0.4	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	0.4	0.0%	0.1
Small-headed cod	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	71	0.0%	0.4	2	0.0%	0.0	0.4	0.0%	0.1
Blotfish	102	0.0%	0.2	64	0.0%	0.2	0	0.0%	0.0	4	0.0%	0.0	0	0.0%	0.0	0.4	0.0%	0.1
Deepsea skates	161	0.0%	0.4	4	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	0.4	0.0%	0.1
Smallscaled brown sickhead	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	65	0.0%	0.4	0	0.0%	0.0	0.4	0.0%	0.1
Lanternfish	1	0.0%	0.0	140	0.0%	0.4	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	0.4	0.0%	0.1
Deepwater eel (Unspecified)	105	0.0%	0.3	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	0.3	0.0%	0.1
Widened chinamoa	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	5	0.0%	0.0	0	0.0%	0.0	0.3	0.0%	0.1
Conger eel	34	0.0%	0.1	63	0.0%	0.2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	0.2	0.0%	0.0
Banded bellowsfish	49	0.0%	0.1	6	0.0%	0.0	0	0.0%	0.0	14	0.0%	0.1	0	0.0%	0.0	0.2	0.0%	0.0
Unidentified fish	68	0.0%	0.2	6	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	1	0.0%	0.0	0.2	0.0%	0.0
Olfers rattail	77	0.0%	0.2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	0.2	0.0%	0.0
Spineback	7	0.0%	0.0	18	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	17	0.0%	0.1	0.2	0.0%	0.0
Deep-sea spider crab	71	0.0%	0.2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	0.2	0.0%	0.0
Red scorpion fish	0	0.0%	0.0	60	0.0%	0.2	2	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	0.2	0.0%	0.0
Sunfish	46	0.0%	0.1	17	0.0%	0.0	0	0.0%	0.0	3	0.0%	0.0	0	0.0%	0.0	0.2	0.0%	0.0
Eels, Marine (Unspecified)	0	0.0%	0.0	52	0.0%	0.1	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	0.1	0.0%	0.0
Brown botulia	19	0.0%	0.0	24	0.0%	0.1	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	0.1	0.0%	0.0
Fangtooth	1	0.0%	0.0	36	0.0%	0.1	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	0.1	0.0%	0.0
Bellowsfish	2	0.0%	0.0	2	0.0%	0.0	2	0.0%	0.0	10								



East & South Chatham Rise ORH fishery (UoC): elasmobranch (potentially vulnerable) species

All commercial tows	2,251	1,659	715	869	942
All obs tows	920	657	85	145	136
Percentage of tows observed	40.9%	39.6%	11.9%	16.7%	14.4%

Species	2008/09			2009/10			2010/11			2011/12			2013/14			Scaled up total 5 yr catch (t)	% total catch	Average annual catch (t)
	kg	%	tonnes	kg	%	tonnes	kg	%	tonnes	kg	%	tonnes	kg	%	tonnes			
Units	kg	%	tonnes	kg	%	tonnes	kg	%	tonnes	kg	%	tonnes	kg	%	tonnes	tonnes	%	tonnes
Baxter's lantern dogfish	60,359	1.3%	147.7	56,258	1.3%	142.1	4,604	0.6%	38.7	15,840	1.3%	94.9	2,656	0.2%	18.4	441.8	1.0%	88.4
Deepwater dogfish (Unspecified)	50,708	1.1%	124.1	15,773	0.4%	39.8		0.0%	0.0	2,336	0.2%	14.0	270	0.0%	1.9	179.8	0.4%	36.0
Other sharks & dogfish*	570	0.0%	1.4	25,642	0.6%	64.7	9,900	1.4%	83.3	1,694	0.1%	10.2	1,940	0.1%	13.4	173.0	0.4%	34.6
Shovelnose dogfish	14,638	0.3%	35.8	26,053	0.6%	65.8	303	0.0%	2.5	711	0.1%	4.3	2,153	0.2%	14.9	123.3	0.3%	24.7
Seal shark	18,973	0.4%	46.4	2,590	0.1%	6.5	105	0.0%	0.9	5,143	0.4%	30.8	340	0.0%	2.4	87.0	0.2%	17.4
Long-nosed chimaera	4,215	0.1%	10.3	8,167	0.2%	20.6	8	0.0%	0.1	150	0.0%	0.9	199	0.0%	1.4	33.3	0.1%	6.7
Longnose velvet dogfish	4,300	0.1%	10.5	3,001	0.1%	7.6	219	0.0%	1.8	162	0.0%	1.0	88	0.0%	0.6	21.5	0.0%	4.3
Cookiecutter shark		0.0%	0.0		0.0%	0.0	1,664	0.2%	14.0		0.0%	0.0		0.0%	0.0	14.0	0.0%	2.8
Plunket's shark	3,621	0.1%	8.9	1,024	0.0%	2.6	12	0.0%	0.1	159	0.0%	1.0	12	0.0%	0.1	12.6	0.0%	2.5
Leafscale gulper shark	692	0.0%	1.7	998	0.0%	2.5	72	0.0%	0.6	292	0.0%	1.7	477	0.0%	3.3	9.9	0.0%	2.0
Pale ghost shark	794	0.0%	1.9	1,614	0.0%	4.1	39	0.0%	0.3	86	0.0%	0.5	49	0.0%	0.3	7.2	0.0%	1.4
Cat shark	110	0.0%	0.3	1,743	0.0%	4.4		0.0%	0.0	28	0.0%	0.2		0.0%	0.0	4.8	0.0%	1.0
Chimaera spp.	146	0.0%	0.4	28	0.0%	0.1	17	0.0%	0.1		0.0%	0.0	288	0.0%	2.0	2.6	0.0%	0.5
Smooth skin dogfish	221	0.0%	0.5	543	0.0%	1.4	16	0.0%	0.1		0.0%	0.0	43	0.0%	0.3	2.3	0.0%	0.5
Smooth skate	9	0.0%	0.0	768	0.0%	1.9		0.0%	0.0		0.0%	0.0	20	0.0%	0.1	2.1	0.0%	0.4
Longnosed deepsea skate	67	0.0%	0.2	687	0.0%	1.7	2	0.0%	0.0		0.0%	0.0	6	0.0%	0.0	2.0	0.0%	0.4
Roughskin dogfish		0.0%	0.0	595	0.0%	1.5	14	0.0%	0.1		0.0%	0.0		0.0%	0.0	1.6	0.0%	0.3
Purple chimaera		0.0%	0.0	116	0.0%	0.3		0.0%	0.0	128	0.0%	0.8	64	0.0%	0.4	1.5	0.0%	0.3
Deepwater spiny skate	12	0.0%	0.0	202	0.0%	0.5		0.0%	0.0	52	0.0%	0.3	34	0.0%	0.2	1.1	0.0%	0.2
Chimaera, purple	102	0.0%	0.2	274	0.0%	0.7		0.0%	0.0	19	0.0%	0.1		0.0%	0.0	1.1	0.0%	0.2
Potuguese dogfish	75	0.0%	0.2	265	0.0%	0.7		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.9	0.0%	0.2
Rough shovelnose dogfish		0.0%	0.0	319	0.0%	0.8		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.8	0.0%	0.2
Etmopterus spp.	250	0.0%	0.6		0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.6	0.0%	0.1
Lucifer dogfish	180	0.0%	0.4		0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.4	0.0%	0.1
Deepsea skates	161	0.0%	0.4	4	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.4	0.0%	0.1
Ghost shark	78	0.0%	0.2	11	0.0%	0.0		0.0%	0.0	10	0.0%	0.1		0.0%	0.0	0.3	0.0%	0.1
Widenosed chimaera		0.0%	0.0		0.0%	0.0		0.0%	0.0	5	0.0%	0.0	32	0.0%	0.2	0.3	0.0%	0.1
Giant black ghost shark	34	0.0%	0.1		0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.1	0.0%	0.0
Velvet dogfish		0.0%	0.0	32	0.0%	0.1		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.1	0.0%	0.0
Rough skate		0.0%	0.0	25	0.0%	0.1		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.1	0.0%	0.0
Hydrolagus spp.	15	0.0%	0.0	10	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.1	0.0%	0.0
Skate, Other	1	0.0%	0.0	9	0.0%	0.0	2	0.0%	0.0		0.0%	0.0	2	0.0%	0.0	0.1	0.0%	0.0
Spiny dogfish	13	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Prickly dogfish	5	0.0%	0.0	2	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Slender smooth-hound		0.0%	0.0		0.0%	0.0	2	0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Electric ray		0.0%	0.0	6	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Notoraja spinifera		0.0%	0.0		0.0%	0.0		0.0%	0.0	1	0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Long-tailed skate	2	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Elasmobranch total	160,351	3.5%	392.3	146,759	3.3%	370.6	16,979	2.4%	142.8	26,816	2.2%	160.7	8,681	0.6%	60.1	1,126.6	2.5%	225.3
ALL SPECIES TOTAL	4,532,932	100.0%	11,090.9	4,455,394	100.0%	11,250.4	716,671	100.0%	6,028.5	1,219,241	100.0%	7,307.0	1,401,708	100.0%	9,708.9	45,385.7	100.0%	9,077.1

*Sharks & Dogfish not otherwise specified in Schedule 3, Part 2 of the Reporting Regulations 2001

Table ordered by 5-yr average annual catch

There are no bycatch species that exceed the 5% minor/major threshold

x% = Where 5-year annual %age catch exceeds 1% for the 'shark' species.



Species	Scaled up 4 yr catch Units tonnes	% total catch in E&S fishery %	Avg annual catch in certified fishery (t) tonnes	Avg annual Scaled FMA 4 catch (all methods) tonnes	Avg annual Scaled EEZ catch tonnes	% of FMA 4 catch in UoC %	% of EEZ catch from UoC %	% of EEZ catch of combined ETB, DWD, and OSD from UoC
Baxter's lantern dogfish	441.8	1.2%	105.8	205.2	431.6	51.6%	24.5%	23.6%
Deepwater dogfish (Unspecified)	179.8	0.5%	44.5	109.7	133.2	40.6%	33.4%	
Other sharks & dogfish (Unspecified)*	173.0	0.4%	39.9	104.9	239.7	38.0%	16.6%	

* Sharks & Dogfish not otherwise specified in Sch3, Part2 Reporting Regs 2001

08/09 to 11/12 FMA 4 scaling

Total tows on CR	23,284
Obs tows on CR	4,884
Approximate observed %	21%

BLL coverage on CR in 10/11 0.065

08/09-11/12 ETB is mostly caught by mid-water and DW trawling, and BLL so the overall obs % for those methods has been used

Total tows by vessels >28m in EEZ	112,470
Observed tows by vessels >28m in EEZ	29,555
Approximate observed %	26%