



Northwest Chatham Rise ORH fishery: QMS (retained) species

All commercial tows	186	280	11	13
All obs tows	66	87	5	9
Percentage of tows observed	35.5%	31.1%	45.5%	69.2%

Species	2008/09			2009/10			2010/11			2012/13			Scaled up total 4 yr catch	% total catch	Average annual catch
	kg	%	tonnes	kg	%	tonnes	kg	%	tonnes	kg	%	tonnes	tonnes	%	tonnes
Orange roughy	330,650	80.4%	931.8	183,758	61.4%	591.4	13,971	92.1%	30.7	77,924	97.3%	112.6	1,666.5	73.4%	416.6
Hoki	21,364	5.2%	60.2	40,245	13.5%	129.5	8	0.1%	0.0	53	0.1%	0.1	189.8	8.4%	47.5
Smooth oreo	11,863	2.9%	33.4	5,431	1.8%	17.5	76	0.5%	0.2	586	0.7%	0.8	51.9	2.3%	13.0
Hake	2,394	0.6%	6.7	2,382	0.8%	7.7		0.0%	0.0	6	0.0%	0.0	14.4	0.6%	3.6
Pale ghost shark	254	0.1%	0.7	777	0.3%	2.5	6	0.0%	0.0		0.0%	0.0	3.2	0.1%	0.8
Ghost shark	551	0.1%	1.6	428	0.1%	1.4		0.0%	0.0		0.0%	0.0	2.9	0.1%	0.7
Ribaldo	414	0.1%	1.2	157	0.1%	0.5		0.0%	0.0		0.0%	0.0	1.7	0.1%	0.4
Cardinal fish	92	0.0%	0.3	120	0.0%	0.4	43	0.3%	0.1	33	0.0%	0.0	0.8	0.0%	0.2
Black oreo	39	0.0%	0.1	34	0.0%	0.1	1	0.0%	0.0	191	0.2%	0.3	0.5	0.0%	0.1
Ling	87	0.0%	0.2		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.2	0.0%	0.1
Spiky oreo	56	0.0%	0.2	10	0.0%	0.0		0.0%	0.0		0.0%	0.0	0.2	0.0%	0.0
King crab	21	0.0%	0.1	30	0.0%	0.1		0.0%	0.0		0.0%	0.0	0.2	0.0%	0.0
Smooth skate		0.0%	0.0	22	0.0%	0.1		0.0%	0.0		0.0%	0.0	0.1	0.0%	0.0
Lookdown dory	9	0.0%	0.0	1	0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Flatfish	5	0.0%	0.0	2	0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Sea perch	6	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Giant stargazer		0.0%	0.0	5	0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Alfonsino	4	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Rough skate	3	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Spiny dogfish	2	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Arrow squid		0.0%	0.0	2	0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
QMS Species total	367,814	89.5%	1,036.6	233,404	78.0%	751.2	14,105	92.9%	31.0	78,793	98.4%	113.8	1,932.6	85.1%	483.1
ALL SPECIES TOTAL	411,150	100.0%	1,158.7	299,080	100.0%	962.6	15,177	100.0%	33.4	80,108	100.0%	115.7	2,270.4	100.0%	567.6

Where 4-year annual %age catch exceeds 5% for the species



Northwest Chatham Rise ORH fishery: non-QMS (bycatch) species

All commercial tows	186	280	11	13
All obs tows	66	87	5	9
Percentage of tows observed	35.5%	31.1%	45.5%	69.2%

Species	2008/09			2009/10			2010/11			2012/13			Scaled up total 4 yr catch tonnes	% total catch	Average annual catch tonnes
	Units	kg	% tonnes	kg	% tonnes	kg	% tonnes	kg	% tonnes	kg	% tonnes				
Rattails	6,124	1.5%	17.3	28,112	9.4%	90.5	12	0.1%	0.0	12	0.0%	0.0	107.8	4.7%	26.9
Slickhead	10,771	2.6%	30.4	10,894	3.6%	35.1	1	0.0%	0.0		0.0%	0.0	65.4	2.9%	16.4
Morids	1,580	0.4%	4.5	8,971	3.0%	28.9	23	0.2%	0.1		0.0%	0.0	33.4	1.5%	8.3
Deepwater dogfish (Unspecified)	4,504	1.1%	12.7	3,531	1.2%	11.4		0.0%	0.0		0.0%	0.0	24.1	1.1%	6.0
Other Sharks and Dogfish*	2,903	0.7%	8.2	2,590	0.9%	8.3		0.0%	0.0	85	0.1%	0.1	16.6	0.7%	4.2
Baxter's lantern dogfish	1,713	0.4%	4.8	1,550	0.5%	5.0	794	5.2%	1.7	994	1.2%	1.4	13.0	0.6%	3.2
Johnson's cod	3,534	0.9%	10.0	1,231	0.4%	4.0	66	0.4%	0.1	33	0.0%	0.0	14.1	0.6%	3.5
Long-nosed chimaera	2,024	0.5%	5.7	2,758	0.9%	8.9		0.0%	0.0		0.0%	0.0	14.6	0.6%	3.6
Basketwork eel	2,204	0.5%	6.2	906	0.3%	2.9	15	0.1%	0.0	1	0.0%	0.0	9.2	0.4%	2.3
Four-rayed rattail	2,733	0.7%	7.7	4	0.0%	0.0		0.0%	0.0		0.0%	0.0	7.7	0.3%	1.9
Warty squid	1,191	0.3%	3.4	829	0.3%	2.7	2	0.0%	0.0		0.0%	0.0	6.0	0.3%	1.5
Shovelnose dogfish	1,171	0.3%	3.3	209	0.1%	0.7		0.0%	0.0		0.0%	0.0	4.0	0.2%	1.0
Seal shark	233	0.1%	0.7	987	0.3%	3.2	7	0.0%	0.0		0.0%	0.0	3.8	0.2%	1.0
Longnose velvet dogfish	310	0.1%	0.9	516	0.2%	1.7	1	0.0%	0.0	19	0.0%	0.0	2.6	0.1%	0.6
Plunket's shark	205	0.0%	0.6	167	0.1%	0.5	131	0.9%	0.3	150	0.2%	0.2	1.6	0.1%	0.4
Violet cod	445	0.1%	1.3	90	0.0%	0.3		0.0%	0.0		0.0%	0.0	1.5	0.1%	0.4
Smooth skin dogfish	395	0.1%	1.1	108	0.0%	0.3	7	0.0%	0.0		0.0%	0.0	1.5	0.1%	0.4
Leafscale gulper shark	90	0.0%	0.3	325	0.1%	1.0	10	0.1%	0.0	13	0.0%	0.0	1.3	0.1%	0.3
Deepsea skates		0.0%	0.0	383	0.1%	1.2	1	0.0%	0.0		0.0%	0.0	1.2	0.1%	0.3
Javelinfin	278	0.1%	0.8	72	0.0%	0.2		0.0%	0.0	1	0.0%	0.0	1.0	0.0%	0.3
Toadfish	249	0.1%	0.7	89	0.0%	0.3		0.0%	0.0		0.0%	0.0	1.0	0.0%	0.2
Skate, Other	333	0.1%	0.9	3	0.0%	0.0		0.0%	0.0	1	0.0%	0.0	0.9	0.0%	0.2
Roughskin dogfish	23	0.0%	0.1	288	0.1%	0.9		0.0%	0.0		0.0%	0.0	1.0	0.0%	0.2
Chimaera spp.		0.0%	0.0	258	0.1%	0.8	1	0.0%	0.0		0.0%	0.0	0.8	0.0%	0.2
Conger eel	125	0.0%	0.4	50	0.0%	0.2		0.0%	0.0		0.0%	0.0	0.5	0.0%	0.1
Longnosed deepsea skate	14	0.0%	0.0	151	0.1%	0.5		0.0%	0.0		0.0%	0.0	0.5	0.0%	0.1
Eels, Marine (Unspecified)		0.0%	0.0	160	0.1%	0.5		0.0%	0.0		0.0%	0.0	0.5	0.0%	0.1
Warty oreo		0.0%	0.0	84	0.0%	0.3		0.0%	0.0		0.0%	0.0	0.3	0.0%	0.1
Spineback	13	0.0%	0.0	64	0.0%	0.2		0.0%	0.0		0.0%	0.0	0.2	0.0%	0.1
Witch		0.0%	0.0	52	0.0%	0.2		0.0%	0.0		0.0%	0.0	0.2	0.0%	0.0
Deepwater octopus	50	0.0%	0.1		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.1	0.0%	0.0
Chimaera, purple	14	0.0%	0.0	34	0.0%	0.1		0.0%	0.0		0.0%	0.0	0.1	0.0%	0.0
Deepwater spiny skate		0.0%	0.0	39	0.0%	0.1		0.0%	0.0		0.0%	0.0	0.1	0.0%	0.0
Rays		0.0%	0.0	35	0.0%	0.1		0.0%	0.0		0.0%	0.0	0.1	0.0%	0.0
Purple chimaera		0.0%	0.0	30	0.0%	0.1		0.0%	0.0		0.0%	0.0	0.1	0.0%	0.0
Brodie's king crab	16	0.0%	0.0	5	0.0%	0.0		0.0%	0.0		0.0%	0.0	0.1	0.0%	0.0
Cat shark	11	0.0%	0.0	5	0.0%	0.0	1	0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Bellowsfish	16	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Jellyfish (Unspecified)	14	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Oilfish		0.0%	0.0	10	0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Frill shark		0.0%	0.0	10	0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Violet squid		0.0%	0.0	8	0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Prawn (Unspecified)	1	0.0%	0.0	7	0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Prickly dogfish		0.0%	0.0	8	0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Pholidoteuthis boschmai		0.0%	0.0	8	0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Squid (Unspecified)	7	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Ommastrephes bartrami		0.0%	0.0	6	0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Codheaded rattail	6	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Deep-sea blind lobster	6	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Cookiecutter shark		0.0%	0.0	5	0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Gastropods		0.0%	0.0	5	0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Unidentified fish	3	0.0%	0.0	1	0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Cardinal fish, bigeye	1	0.0%	0.0	3	0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Lancetfish		0.0%	0.0	3	0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Dealfish		0.0%	0.0	3	0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Pink frogmouth	1	0.0%	0.0	2	0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Deepsea flathead	1	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	3	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Cardinal fish, robust		0.0%	0.0		0.0%	0.0		0.0%	0.0	3	0.0%	0.0	0.0	0.0%	0.0
Lighthouse fish		0.0%	0.0	3	0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Crab (Unspecified)	2	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Hairy conger	2	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Benthoctopus spp.		0.0%	0.0	2	0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Deep-sea spider crab	1	0.0%	0.0	1	0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Swollenhead conger	2	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Serrulate rattail		0.0%	0.0	2	0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Tubbia tasmanica		0.0%	0.0		0.0%	0.0		0.0%	0.0	2	0.0%	0.0	0.0	0.0%	0.0
Golden volute	2	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Spinyfin	2	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Spider crabs (Unspecified)		0.0%	0.0	2	0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Fangtooth	1	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Common roughy	1	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Deepwater prawn	1	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Rudderfish	1	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Black slickhead		0.0%	0.0	1	0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Blue cusk eel	1	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Cooks rattail		0.0%	0.0	1	0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Grenadier cod		0.0%	0.0		0.0%	0.0		0.0%	0.0	1	0.0%	0.0	0.0	0.0%	0.0
Mysid	1	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Scarlet prawn	1	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Viper fish	1	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Mahia rattail		0.0%	0.0	1	0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Barracudinas		0.0%	0.0	1	0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0



Manefish	1	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0	0.0%	0.0
Small-headed cod		0.0%	0.0	1	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0	0.0%	0.0
Silver roughy	1	0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0	0.0%	0.0
non-QMS species total	43,336	10.5%	122.1	65,676	22.0%	211.4	1,072	7.1%	2.4	1,315	1.6%	1.9		337.8	14.9%	84.4
ALL SPECIES TOTAL	411,150	100.0%	1,158.7	299,080	100.0%	962.6	15,177	100.0%	33.4	80,108	100.0%	115.7		2,270.4	100.0%	567.6

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

Where 4-year annual %age catch exceeds 5% for the species
Where 4-year annual %age catch exceeds 1% for 'shark' species



Northwest Chatham Rise ORH fishery: elasmobranch (potentially vulnerable) species

All commercial tows	186	280	11	13
All observed tows	66	87	5	9
Percentage of tows observed	35.5%	31.1%	45.5%	69.2%

Species	2008/09			2009/10			2010/11			2012/13			Scaled up 4 yr catch	% total catch	Average annual catch	
	Unit	kg	%	tonnes	kg	%	tonnes	kg	%	tonnes	kg	%				tonnes
Deepwater dogfish (Unspecified)		4,504	1.1%	12.7	3,531	1.2%	11.4		0.0%	0.0		0.0%	0.0	24.1	1.1%	6.0
Other sharks and dogfish*		2,903	0.7%	8.2	2,590	0.9%	8.3		0.0%	0.0	85	0.1%	0.1	16.6	0.7%	4.2
Baxter's lantern dogfish		1,713	0.4%	4.8	1,550	0.5%	5.0	794	5.2%	1.7	994	1.2%	1.4	13.0	0.6%	3.2
Long-nosed chimaera		2,024	0.5%	5.7	2,758	0.9%	8.9		0.0%	0.0		0.0%	0.0	14.6	0.6%	3.6
Shovelnose dogfish		1,171	0.3%	3.3	209	0.1%	0.7		0.0%	0.0		0.0%	0.0	4.0	0.2%	1.0
Seal shark		233	0.1%	0.7	987	0.3%	3.2	7	0.0%	0.0		0.0%	0.0	3.8	0.2%	1.0
Pale ghost shark		254	0.1%	0.7	777	0.3%	2.5	6	0.0%	0.0		0.0%	0.0	3.2	0.1%	0.8
Ghost shark		551	0.1%	1.6	428	0.1%	1.4		0.0%	0.0		0.0%	0.0	2.9	0.1%	0.7
Longnose velvet dogfish		310	0.1%	0.9	516	0.2%	1.7	1	0.0%	0.0	19	0.0%	0.0	2.6	0.1%	0.6
Plunket's shark		205	0.0%	0.6	167	0.1%	0.5	131	0.9%	0.3	150	0.2%	0.2	1.6	0.1%	0.4
Smooth skin dogfish		395	0.1%	1.1	108	0.0%	0.3	7	0.0%	0.0		0.0%	0.0	1.5	0.1%	0.4
Leafscale gulper shark		90	0.0%	0.3	325	0.1%	1.0	10	0.1%	0.0	13	0.0%	0.0	1.3	0.1%	0.3
Deepsea skates			0.0%	0.0	383	0.1%	1.2	1	0.0%	0.0		0.0%	0.0	1.2	0.1%	0.3
Roughskin dogfish	23		0.0%	0.1	288	0.1%	0.9		0.0%	0.0		0.0%	0.0	1.0	0.0%	0.2
Chimaera spp.			0.0%	0.0	258	0.1%	0.8	1	0.0%	0.0		0.0%	0.0	0.8	0.0%	0.2
Longnosed deepsea skate	14		0.0%	0.0	151	0.1%	0.5		0.0%	0.0		0.0%	0.0	0.5	0.0%	0.1
Chimaera, purple	14		0.0%	0.0	34	0.0%	0.1		0.0%	0.0		0.0%	0.0	0.1	0.0%	0.0
Rays			0.0%	0.0	35	0.0%	0.1		0.0%	0.0		0.0%	0.0	0.1	0.0%	0.0
Purple chimaera			0.0%	0.0	30	0.0%	0.1		0.0%	0.0		0.0%	0.0	0.1	0.0%	0.0
Smooth skate			0.0%	0.0	22	0.0%	0.1		0.0%	0.0		0.0%	0.0	0.1	0.0%	0.0
Cat shark	11		0.0%	0.0	5	0.0%	0.0	1	0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Frill shark			0.0%	0.0	10	0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Prickly dogfish			0.0%	0.0	8	0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Cookiecutter shark			0.0%	0.0	5	0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Rough skate	3		0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Electric ray	3		0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Spiny dogfish	2		0.0%	0.0		0.0%	0.0		0.0%	0.0		0.0%	0.0	0.0	0.0%	0.0
Grand Total		14,423	3.5%	40.6	15,175	5.1%	48.8	959	6.3%	2.1	1,261	1.6%	1.8	93.4	4.1%	23.4
ALL SPECIES TOTAL		411,150	100.0%	1,158.7	299,080	100.0%	962.6	15,177	100.0%	33.4	80,108	100.0%	115.7	2,270.4	100.0%	567.6

Note that changes in reporting following the NPOA Sharks has led to a substantial reduction in the use of these codes since

Where 4-year annual %age catch exceeds 1% for 'shark' species



Species/species group	Scaled up		% total catch	Average annual catch in certified fishery 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 %
	Unit	4 yr catch tonnes						
Deepwater dogfish (Unspecified)		24.1	1.1%	6.0	109.7	133.2	5.5%	4.5%
Other sharks and dogfish*		16.6	0.7%	4.2	104.9	239.7	4.0%	1.7%
Baxter's lantern dogfish		13.0	0.6%	3.2	205.2	431.6	1.6%	0.8%

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

08/09 to 11/12 FMA 4 scaling

Total tows on Chatham Rise	23,284
Observed tows on Chatham Rise	4,884
Approximate observed %	21%

08/0 to 11/12 EEZ Scaling

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