

Supporting information S2

Table S2 – Sources of research questions for the 2014 global oceans research priorities survey. Summary of big question, horizon scanning, and expert opinion exercises and reports on ocean research priorities, and disciplinary background, type of professional affiliation, and mean h-index for their marine-oriented co-authors only.

	Article or report details					Co-author characteristics		Disciplinary background ¹			Affiliation ²		h-index ³ of marine co-authors	Considered and used in 2014 Rudd survey ⁴
	Regional focus	Domain	# candidate questions	Minimum # contributors	# issues or questions	Number (total)	Number (marine)	NS	SS	Other	Research	Other		
NON-MARINE FOCUSED														
Big Question Exercises														
Boxall et al. 2012 ⁵	Global	Contaminants	403	161	40	42	1	0	1	0	1	0	16.0	3 / 1
Braunisch et al. 2012 ⁶	Swiss	Biodiversity	86	21	44	4	0	-	-	-	-	-	-	18 / 1
Brown et al. 2010 ⁷	UK	Freshwater	747	350	94	31	1	0	1	0	1	0	6.0	16 / 2
Fleishman et al. 2012	USA	Biodiversity	531	374	40	30	4	1	3	0	1	3	17.5	20 / 1
Ingram et al. 2013	UK	Food	820	456	100	48	5	2	3	0	2	3	10.2	24 / 2
Kark et al. 2011 ⁸	Israel	Biodiversity	-	50	100	33	1	0	0	1	1	0	7.0	25 / 2
Morton et al. 2009 ⁹	Australia	Biodiversity	-	-	22	20	3	3	0	0	3	0	57.0	11 / 0
Pretty et al. 2010	Global	Food	618	200	100	55	1	0	1	0	1	0	27.0	23 / 2
Rudd et al. 2011	Canada	Biodiversity	396	271	40	34	8	4	3	1	6	2	22.8	31 / 11
Sutherland et al. 2006	UK	Ecology	1003	654	100	35	2	2	0	0	1	1	22.5	29 / 1
Sutherland et al. 2009	Global	Biodiversity	2291	761	100	44	7	6	1	0	4	3	36.7	50 / 14
Sutherland et al. 2012b ¹⁰	UK	Policy	239	135	40	52	1	0	0	1	1	0	13.0	15 / 1
Sutherland et al. 2013b	Global	Ecology	754	388	100	34	2	2	0	0	1	1	35.0	28 / 7
Subtotal			7888	3821	920	462	36	20	13	3	23	13		293 / 45
Horizon Scanning Exercises														
Sutherland et al. 2008	UK	Biodiversity	195	452	25	35	2	2	0	0	2	0	37.5	11 / 1
Sutherland et al. 2010 ¹¹	Global	Biodiversity	61	-	15	23	2	2	0	0	1	1	35.0	5 / 1
Sutherland et al. 2011	Global	Biodiversity	71	158	15	25	2	2	0	0	1	1	35.0	4 / 0
Sutherland et al. 2012a	Global	Biodiversity	80	253	15	22	2	2	0	0	1	1	35.0	6 / 1
Sutherland et al. 2013a	Global	Biodiversity	72	190	15	18	1	1	0	0	0	1	30.0	5 / 0
Sutherland et al. 2014	Global	Biodiversity	81	369	15	20	1	1	0	0	0	1	30.0	6 / 2
Subtotal			560	1422	100	143	10	10	0	0	5	5		37 / 5
Total non-marine focused			8848	5243	1020	605	46	30	13	3	28	18		330 / 50
MARINE FOCUSED														
Big Question Exercises														
Feary et al. 2013	Gulf States	Coral reefs	71	31	32	34	32	32	0	0	31	1	12.8	32 / 0
Fissel et al. 2012	Canada	Ocean science	606	203	40	22	18	12	3	3	16	2	25.8	40 / 8
Parsons et al. 2014 ¹²	Global	Biodiversity	631	-	71	21	20	15	2	3	14	6	9.3	71 / 11
Rees et al. 2013	UK	Coastal policy	115	94	34	26	26	19	5	2	20	6	6.7	34 / 1
Vugteveen et al. 2014 ¹³	Wadden Sea	Coastal policy	538	133	25	4	2	2	0	0	2	0	12.5	25 / 0
Subtotal			1961	461	202	107	98	80	10	8	83	15		202 / 20
Expert Opinion Articles														
Borja et al. 2013	Iberia	Ocean science	-	-	12	4	4	4	0	0	4	0	24.0	12 / 2
Heip et al. 2011 ¹⁴	Europe	Ocean science	-	-	75	25	24	23	0	1	24	0	25.5	75 / 8
Heip and McDonough. 2012 ¹⁵	Europe	Ocean science	-	-	10	2	1	2	0	0	1	1	20.5	10 / 0
Snelgrove et al. 2012	Global	Ocean science	-	-	28	13	13	13	0	0	13	0	21.0	28 / 3
Subtotal			-	-	125	44	42	42	0	1	42	1		125 / 13
Total marine-focused			1961	461	327	151	140	122	10	9	125	16		327 / 33
TOTAL			10409	5704	1347	756	186	152	23	12	153	34		657 / 83 ¹⁶

Footnotes: ¹ NS = natural sciences; SS = social sciences including economics; Other = engineering and applied sciences, management, professional fields, arts and humanities, health sciences, and other disciplines; ² Research = academia, government research centers, and non-profit research organizations; Other includes ENGOs, private sector, government policy and management organization, and other organizations; ³ h-index calculated using Google Scholar pages for individuals when available, or Google Scholar-based searches with Publish or Perish; ⁴ global ocean priorities survey conducted February to March 2014; ⁵ Focus was on pharmaceuticals and personal care products (PPCPs) in the environment: the only marine-focused person (Rudd) included acted in a facilitation role for the meeting; ⁶ While terrestrial in orientation, this exercise included a number of general policy-oriented questions of potential use in the marine realm; ⁷ While freshwater in orientation, this exercise included a number of coastal-oriented questions of potential use in the marine realm; ⁸ Kark et al. did not report on how many questions were solicited from their 50 contributors; ⁹ The Morton et al. study did not solicit questions from individuals but relied on experts' participation in a workshop to identify Australian issues: it is included here rather than in a separate non-marine expert opinion category; ¹⁰ A large majority of participants in this exercise were from the UK: while policy questions should have a broad common denominator internationally, it was classified as having a UK focus in this table because of its limited international participation; ¹¹ Sutherland et al. (2008) did not report how many individuals contributed to formulating the 61 candidate questions; ¹² Parsons et al. (2014) did not report how many individuals contributed to formulating the 631 candidate questions; ¹³ The Wadden Sea report had only 4 co-authors but used two broad surveys to derive these questions; ¹⁴ This report was written by only a few of the workshop participants who helped shape the issues and were included in the 'co-author category here; ¹⁵ The Heip and McDonough report is essentially an executive summary of the prior 2011 report, but only contained 10 research priorities in total: as it was redundant with Heip et al. (2011), none of the questions from this exercise were retained for the Rudd 2014 survey; ¹⁶ The 2014 global ocean research priorities survey contained only 67 questions in total: the tally here shows 83 because, in some cases, wording from questions that were very closely related in topic was combined.

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