Table S1. Main database of basic cetacean physical and social data.

Species name	Body mass (g)	Brain mass (g)	EQ	Mean Group Size	Social Organization	Corrected Social Repertoire	Latitude Range (degrees)	Dietary Range	References
Balaena mysticetus	90000000	2843	0.11	2	Ephemeral	0.36	30	1	(*1-3*)
Balaenoptera acutorostrata	9200000	2700	0.49	2	Ephemeral	0.00	135	2	(*1*, *4*)
Balaenoptera bonaerensis				1.5	Ephemeral	0.11	83	2	(*1*)
Balaenoptera borealis	22680000	4900	0.48	3.5	Ephemeral	0.08	150	3	(*1*, *5*, *6*)
Balaenoptera brydei				1.75	Ephemeral		80	3	(*1*, *7*)
Balaenoptera edeni	40000000	3750	0.25	1.75	Ephemeral	0.00	80	3	(*1*, *7*, *8*)
Balaenoptera musculus	50904000	3636	0.21	1.5	Ephemeral	0.00	160	1	(*1*, *9-12*)
Balaenoptera omurai				1.5	Ephemeral		55	1	(*1*)
Balaenoptera physalus	38421500	7085	0.49	2.32	Ephemeral	0.07	160	3	(*1*, *2*, *11-14*)
Berardius arnuxii				8	Mid-sized-groups		60	3	(*1*)
Berardius bairdii	9000000			6.55	Mid-sized-groups	0.00	40	3	(*1*)
Caperea marginata				1.5	Ephemeral		25	1	(*1*)
Cephalorhynchus commersonii	43667	748	4.85	7.23	Mid-sized-groups	0.00	25	3	(*1*, *15*, *16*)
Cephalorhynchus eutropia				10.19	Mid-sized-groups		26	3	(*1*, *15*, *17*)
Cephalorhynchus heavisidii	71000	763	3.57	3.39	Ephemeral		30	2	(*1*, *17*, *18*)
Cephalorhynchus hectori	38000	644	4.58	3.49	Mid-sized-groups	0.31	12	2	(*1*, *17*, *19*)
Delphinapterus leucas	636000	2083	2.24	2.8	Ephemeral	0.62	30	3	(*1*, *2*, *17*, *20*)
Delphinus capensis				281	Mega-pods	0.22	90	2	(*1*, *17*, *21*)
Delphinus delphis	52000	765	4.41	117.75	Mega-pods	0.47	105	2	(*1*, *2*, *17*, *22*)
Delphinus tropicalis									(*1*)
Eschrichtius robustus	14329000	4305	0.58	2.09	Ephemeral	0.38	53	3	(*1*, *2*, *22*, *23*)
Eubalaena australis	12500000	2750	0.4	3	Ephemeral	0.09	45	1	(*1*, *2*, *24*, *25*)
Eubalaena glacialis				1.5	Ephemeral	0.00	45	1	(*1*, *2*, *26*, *27*)
Eubalaena japonica	60793171	2700	0.14	1.5	Ephemeral		40	1	(*1*, *2*, *28*)
Feresa attenuata	125000	1030	3.3	25.35	Mid-sized-groups	0.00	75	3	(*1*, *12*, *16*, *17*, *21*)
Globicephala macrorhynchus	900770	4166	3.56	12.19	Mid-sized-groups	0.37	90	2	(*1*, *2*, *17*, *18*, *21*)
Globicephala melas	943200	2893	2.39	56.79	Mega-pods	0.44	110	3	(*1*, *2*, *17*, *20*)
Grampus griseus	328000	2387	4.01	22.28	Mid-sized-groups	0.00	115	2	(*1*, *17*, *20*)
Hyperoodon ampullatus				2.5	Ephemeral	0.43	45	3	(*1*, *2*, *29*)
Hyperoodon planifrons	600000	2994	3.36	2.5	Ephemeral		60	3	(*1*, *12*, *29-31*)
Indopacetus pacificus				10	Mid-sized-groups		60	1	(*1*)
Inia geoffrensis	90830	632	2.51	2.9	Ephemeral	0.44	23	1	(*1*, *20*, *22*, *32*, *33*)
Kogia breviceps	305000	1012	1.78	3.25	Ephemeral	0.00	100	2	(*1*, *20*, *22*, *34*)
Kogia simus	168500	622	1.63	3	Ephemeral	0.00	75	2	(*1*, *2*, *20*, *22*)

Lagenodelphis hosei	124700	1103	3.54	183.62	Mega-pods	0.31	70	3	(*1, 2, 17, 21, 35*)
Lagenorhynchus acutus	120000	1200	3.95	27.36	Mid-sized-groups	0.19	40	3	(*1, 17, 22*)
Lagenorhynchus albirostris	67500	1126	5.45	54.8	Mega-pods	0.25	45	3	(*1, 17, 22*)
Lagenorhynchus australis				17.5	Mid-sized-groups		25	3	(*1*)
Lagenorhynchus cruciger				6.2	Mid-sized-groups		40	3	(*1, 17*)
Lagenorhynchus obliquidens	91050	1148	4.55	82.6	Mega-pods	0.83	40	2	(*1, 2, 17, 20, 21, 25, 36*)
Lagenorhynchus obscurus	58470	886	4.73	75.71	Mega-pods	0.56	45	2	(*1, 17, 18*)
Lipotes vexillifer	82000	510	2.17	2.5	Ephemeral	0.00	4	1	(*1, 20, 22, 37-39*)
Lissodelphis borealis	73000	1162	5.34	82.72	Mega-pods		30	2	(*1, 2, 16, 17*)
Lissodelphis peronii				67.97	Mega-pods		50	2	(*1, 2, 17*)
Megaptera novaeangliae	39295000	6411	0.44	2.17	Ephemeral	0.60	160	2	(*1, 2, 11, 22, 40*)
Mesoplodon bidens	649000	1440	1.53	6.5	Mid-sized-groups	0.00	42	2	(*1, 41, 42*)
Mesoplodon bowdoini							20	1	(*1*)
Mesoplodon carlhubbsi	1168000	1860	1.33	4	Ephemeral		25	2	(*1, 43, 44*)
Mesoplodon densirostris	767000	1463	1.39	2.67	Ephemeral	0.10	100	2	(*1, 20, 22*)
Mesoplodon europaeus	732500	2149	2.11	3.5	Ephemeral		95	3	(*1, 20, 22, 43*)
Mesoplodon ginkgodens							70	2	(*1*)
Mesoplodon grayi				1.5	Ephemeral		55	1	(*1*)
Mesoplodon hectori				1	Ephemeral		20	1	(*1*)
Mesoplodon layardii				2	Ephemeral		38	3	(*1*)
Mesoplodon mirus	929500	2355	1.97	2	Ephemeral		35	2	(*1, 20, 22*)
Mesoplodon perrini							20	2	(*1*)
Mesoplodon peruvianus				2.3	Ephemeral		60	3	(*1*)
Mesoplodon stejnegeri				10	Mid-sized-groups		27	3	(*1*)
Mesoplodon traversii							15		(*1*)
Monodon monoceros	1578330	2997	1.76	4.08	Ephemeral	0.08	24	2	(*1, 2, 17, 20, 22, 45*)
Neophocaena asiaeorientalis	34000	422	3.24			0.00			(*46, 47*)
Neophocaena phocaenoides	32400	468	3.71	1.97	Ephemeral	0.00	45	3	(*1, 17, 22, 46*)
Orcaella brevirostris				1.81	Ephemeral	0.52	50	2	(*1, 17, 48*)
Orcaella heinsohni				5.3	Mid-sized-groups		28	3	(*1*)
Orcinus orca	1955450	5059	2.57	6.45	Mid-sized-groups	1.68	160	4	(*1, 2, 17, 20, 25, 49*)
Peponocephala electra	206638	1392	3.19	244.18	Mega-pods	0.00	75	3	(*17, 21, 50*)
Phocoena dioptrica				2.33	Ephemeral		24	2	(*1, 17*)
Phocoena phocoena	51193	540	3.15	3.51	Ephemeral	0.14	80	2	(*1, 2, 17, 20, 25*)
Phocoena sinus				1.86	Ephemeral	0.00	4	3	(*1, 2, 17*)
Phocoena spinipinnis	68040	597	2.88	4.89	Ephemeral	0.00	51	3	(*1, 17, 18*)
Phocoenoides dalli	86830	866	3.54	5.33	Ephemeral	0.00	34	3	(*1, 2, 17, 20*)
Physeter macrocephalus	35833330	8028	0.58	7	Mid-sized-	0.35	160	2	(*2, 11, 18, 22, 51*)

					groups				
Platanista gangetica	59630	295	1.55	2.45	Ephemeral	0.00	15	2	(*1, 20, 52*)
Pontoporia blainvillei	34890	221	1.67	1.17	Ephemeral	0.25	22	3	(*1, 20, 25, 53*)
Pseudorca crassidens	402000	4249	6.23	40.83	Mid-sized-groups	0.89	100	3	(*1, 2, 16, 17, 54*)
Sotalia fluviatilis	42200	688	4.56	3.9	Ephemeral	0.76	20	1	(*1, 20, 22, 33*)
Sotalia guianensis	42200			2	Ephemeral	0.90	40	2	(*1, 17*)
Sousa chinensis	85000	1247	5.18	2.05	Ephemeral	1.04	65	3	(*1, 17, 55*)
Sousa plumbea				6.89	Mid-sized-groups				(*17*)
Sousa teuszi				6	Mid-sized-groups		40	1	(*1*)
Stenella attenuata	77000	748	3.32	143.28	Mega-pods	0.00	80	3	(*1, 2, 16, 17, 21, 56*)
Stenella clymene	86000	666	2.74	40.44	Mega-pods		75	2	(*1, 17, 18*)
Stenella coeruleoalba	53400	819	4.64	147.9	Mega-pods	0.07	115	2	(*1, 17, 57*)
Stenella frontalis				17.53		2.24	85	3	(*1, 2, 17*)
Stenella longirostris	66200	660	3.24	81.88	Mega-pods	0.66	75	3	(*1, 2, 11, 17, 20, 21*)
Steno bredanensis	123830	1542	4.97	16.79	Mid-sized-groups	0.78	72	2	(*1, 2, 17, 18, 21*)
Tasmacetus shepherdi				4.5	Mid-sized-groups		20	3	(*1*)
Tursiops aduncus				51.67	Ephemeral	1.50	65	2	(*1, 17*)
Tursiops truncatus	209530	1824	4.14	16.97	Mid-sized-groups	1.98	120	3	(*1, 2, 16, 17, 20*)
Ziphius cavirostris	2273000	2004	0.92	2.3	Ephemeral	0.00	135	3	(*1, 20*)

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