

Annex E

Summary of Available Data for JARPN II

Taken from SC/J09/JR1 (*= database complete)

I SIGHTING DATA - Coastal and Offshore components

DB		Total sample size
	Angle and distance experiment data (no. of experiments)	3,807
*	Photo ID humpback whales (no. of schools photographed)	24
*	Photo ID right whales (no. of schools photographed)	22
*	Photo ID blue whales (no. of schools photographed)	65
*	Sighting data (no. of schools)	9,426
*	Effort data (n.miles)	439,047
	Weather data (no. observations)	66,260

II-1. BIOLOGICAL DATA - COMMON MINKE WHALE - Offshore component

DB	Data and sample	Number of whales		
		Male	Female	Total
*	Sampling date	661	79	740
*	Sampling location	661	79	740
*	Body length	661	79	740
*	Body proportion	661	79	740
	Skull (length and breadth)	656	78	734
	Body scar record	661	79	740
	Parasites, external occurrence record	661	79	740
	Parasites, internal occurrence record	661	79	740
*	Sex	661	79	740
*	Body weight	661	79	740
*	Organ weights	158	23	181
*	Blubber thickness	661	79	740
*	Girth	661	79	740
*	Maturity stage	661	79	740
	Corpora albicantia and lutea (number)	-	79	79
*	Lactation condition	-	79	79
*	Testis weight	661	-	661
*	Stomach contents (IWS format)	661	79	740
*	Stomach contents weights	661	79	740
*	Main prey species in stomach contents	661	79	740
*	Freshness of stomach contents	661	79	740
	Foetus, number	-	79	79
	Foetus, sex	-	-	35
	Foetus, body length	-	-	35
	Foetus, body weight	-	-	35
	Ear plug	661	79	740
*	PCB concentrations (blubber)	347	-	347
*	Total Hg levels (liver)	77	-	77
*	Total Hg, methyl Hg and Se levels (liver)	35	5	40
*	Total Hg, methyl Hg and Se levels (kidney)	35	5	40
*	Total Hg, methyl Hg and Se levels (muscle)	35	5	40
*	Mitochondrial DNA control region sequences	655	79	734
*	Nuclear DNA microsatellite (16 loci)	654	79	733

II-2. BIOLOGICAL DATA - SEI WHALE - Offshore component

DB	Data and sample	Number of whales		
		Male	Female	Total
*	Sampling date	238	251	489
*	Sampling location	238	251	489
*	Body length	238	251	489
*	Body proportion	238	251	489
	Skull (length and breadth)	232	243	475
	Body scar record	238	251	489
	Parasites, external occurrence record	238	251	489
	Parasites, internal occurrence record	238	251	489
*	Sex	238	251	489
*	Body weight	238	251	489
*	Organ weights	63	64	127
*	Blubber thickness	238	251	489
*	Girth	238	251	489
*	Maturity stage	238	251	489
	Corpora albicantia and lutea (number)	-	251	251
*	Lactation condition	-	251	251
*	Testis weight	238	-	238
*	Stomach contents (IWS format)	238	251	489
*	Stomach contents weights	238	251	489
*	Main prey species in stomach contents	238	251	489
*	Freshness of stomach contents	238	251	489
	Foetus, number	-	251	251
	Foetus, sex	-	-	115
	Foetus, body length	-	-	115
	Foetus, body weight	-	-	115
	Ear plug	238	251	489
*	PCB concentrations (blubber)	15	-	15
*	Total Hg levels (liver)	30	-	30
*	Total Hg, methyl Hg and Se levels (liver)	-	-	-
*	Total Hg, methyl Hg and Se levels (kidney)	-	-	-
*	Total Hg, methyl Hg and Se levels (muscle)	-	-	-
*	Mitochondrial DNA control region sequences	238	251	489
*	Nuclear DNA microsatellite (17 loci)	238	251	489

II-3. BIOLOGICAL DATA - BRYDE'S WHALE - Offshore component

DB	Data and sample	Number of whales		
		Male	Female	Total
*	Sampling date	166	227	393
*	Sampling location	166	227	393
*	Body length	166	227	393
*	Body proportion	166	227	393
	Skull (length and breadth)	161	222	383
	Body scar record	166	227	393
	Parasites, external occurrence record	166	227	393
	Parasites, internal occurrence record	166	227	393
*	Sex	166	227	393
*	Body weight	166	227	393
*	Organ weights	56	71	127
*	Blubber thickness	166	227	393
*	Girth	166	227	393
*	Maturity stage	166	227	393
	Corpora albicantia and lutea (number)	-	227	227
*	Lactation condition	-	227	227
*	Testis weight	166	-	166
*	Stomach contents (IWS format)	166	227	393
*	Stomach contents weights	166	227	393
*	Main prey species in stomach contents	166	227	393
*	Freshness of stomach contents	166	227	393
	Foetus, number	-	227	227
	Foetus, sex	-	-	127
	Foetus, body length	-	-	127
	Foetus, body weight	-	-	127
	Ear plug	166	227	393
*	PCB concentrations (blubber)	15	-	15
*	Total Hg levels (liver)	20	-	20
*	Total Hg, methyl Hg and Se levels (liver)	21	22	43
*	Total Hg, methyl Hg and Se levels (kidney)	21	22	43
*	Total Hg, methyl Hg and Se levels (muscle)	21	22	43
*	Mitochondrial DNA control region sequences	166	227	393
*	Nuclear DNA microsatellite (17 loci)	166	227	393

II-4. BIOLOGICAL DATA - SPERM WHALE - Offshore component

DB	Data and sample	Number of whales		
		Male	Female	Total
*	Sampling date	13	32	45
*	Sampling location	13	32	45
*	Body length	13	32	45
*	Body proportion	13	32	45
	Skull (length and breadth)	13	30	43
	Body scar record	13	32	45
	Parasites, external occurrence record	13	32	45
	Parasites, internal occurrence record	13	32	45
*	Sex	13	32	45
*	Body weight	13	32	45
*	Organ weights	8	22	30
*	Blubber thickness	13	32	45
*	Girth	13	32	45
*	Maturity stage	13	32	45
	Corpora albicantia and lutea (number)	-	32	32
*	Lactation condition	-	32	32
*	Testis weight	13	-	13
*	Stomach contents (IWS format)	13	32	45
*	Stomach contents weights	13	32	45
*	Main prey species in stomach contents	13	32	45
*	Freshness of stomach contents	13	32	45
	Foetus, number	-	32	32
	Foetus, sex	-	-	7
	Foetus, body length	-	-	7
	Foetus, body weight	-	-	7
	Ear plug	13	32	45
*	PCB concentrations (blubber)	-	-	-
*	Total Hg levels (liver)	-	-	-
*	Total Hg, methyl Hg and Se levels (liver)	3	2	5
*	Total Hg, methyl Hg and Se levels (kidney)	3	2	5
*	Total Hg, methyl Hg and Se levels (muscle)	3	2	5
*	Mitochondrial DNA control region sequences	13	32	45
*	Nuclear DNA microsatellite (15 loci)	13	32	45

II-5. BIOLOGICAL DATA - COMMON MINKE WHALE - Coastal component off Kushiro

DB	Data and sample	Number of whales		
		Male	Female	Total
*	Sampling date	182	72	254
*	Sampling location	182	72	254
*	Body length	182	72	254
*	Body proportion	182	72	254
	Skull (length and breadth)	181	72	253
	Body scar record	182	72	254
	Parasites, external occurrence record	182	72	254
	Parasites, internal occurrence record	-	-	-
*	Sex	182	72	254
*	Body weight	182	72	254
*	Organ weights	11	3	14
*	Blubber thickness	182	72	254
*	Girth	182	72	254
*	Maturity stage	182	72	254
	Corpora albicantia and lutea (number)	-	72	72
*	Lactation condition	-	72	72
*	Testis weight	182	-	182
*	Stomach contents (IWS format)	182	72	254
*	Stomach contents weights	182	72	254
*	Main prey species in stomach contents	182	72	254
*	Freshness of stomach contents	182	72	254
	Foetus, number	-	72	72
	Foetus, sex	-	-	4
	Foetus, body length	-	-	4
	Foetus, body weight	-	-	4
	Ear plug	181	71	252
*	PCB concentrations (blubber)	-	-	-
*	Total Hg levels (liver)	46	-	46
*	Total Hg, methyl Hg and Se levels (liver)	-	-	-
*	Total Hg, methyl Hg and Se levels (kidney)	-	-	-
*	Total Hg, methyl Hg and Se levels (muscle)	-	-	-
*	Mitochondrial DNA control region sequences	181	72	253
*	Nuclear DNA microsatellite (16 loci)	182	71	253

II-6. BIOLOGICAL DATA - COMMON MINKE WHALE - Coastal component off Sanriku

DB	Data and sample	Number of whales		
		Male	Female	Total
*	Sampling date	91	136	227
*	Sampling location	91	136	227
*	Body length	91	136	227
*	Body proportion	91	136	227
	Skull (length and breadth)	89	133	222
	Body scar record	91	136	227
	Parasites, external occurrence record	91	136	227
	Parasites, internal occurrence record	-	-	-
*	Sex	91	136	227
*	Body weight	91	136	227
*	Organ weights	4	5	9
*	Blubber thickness	91	136	227
*	Girth	91	136	227
*	Maturity stage	91	136	227
	Corpora albicantia and lutea (number)	-	135	135
*	Lactation condition	-	136	136
*	Testis weight	89	-	89
*	Stomach contents (IWS format)	91	136	227
*	Stomach contents weights	89	133	222
*	Main prey species in stomach contents	91	136	227
*	Freshness of stomach contents	91	136	227
	Foetus, number	-	135	135
	Foetus, sex	-	-	30
	Foetus, body length	-	-	30
	Foetus, body weight	-	-	30
	Ear plug	91	136	227
*	PCB concentrations (blubber)	-	-	-
*	Total Hg levels (liver)	29	-	29
*	Total Hg, methyl Hg and Se levels (liver)	-	-	-
*	Total Hg, methyl Hg and Se levels (kidney)	-	-	-
*	Total Hg, methyl Hg and Se levels (muscle)	-	-	-
*	Mitochondrial DNA control region sequences	91	136	227
*	Nuclear DNA microsatellite (16 loci)	91	136	227

III. POLLUTANT DATA (Environmental and prey species samples) - Offshore component

DB	Item	Number of samples
*	Organochlorine compounds (air)	6
*	Organochlorine compounds (sea water)	7
*	Total Hg compounds (copepods)	5
*	Total Hg compounds (Krill)	17
*	Total Hg compounds (Larval of anchovy)	6
*	Total Hg compounds (Adult of anchovy)	20
*	Total Hg compounds (Pacific saury)	41
*	Total Hg compounds (mackerels)	5
*	Total Hg compounds (Pacific pomfret)	3
*	Organochlorine compounds (walleye pollock)	2

IV-1. OCEANOGRAPHIC DATA - Offshore component

DB		Number of samples
	Marine debris (sighting survey, days)	56
*	Temperature & Salinity (XCTD survey: 2000-2007)	38
*	Temperature & Salinity (CTD survey: 2000-2007)	593
*	Midwater trawl (# of hauls)	141
*	MOCNESS (# of hauls)	24
*	IKMT (# of hauls)	30
*	NORPAC (# of hauls)	75
*	Echo sounder (km: 2002-2007)	12,838

IV-2. OCEANOGRAPHIC DATA - Coastal component off Sanriku

DB		Number of samples
*	Temperature & Salinity (XCTD survey: 2003-2007)	11
*	Temperature & Salinity (CTD survey: 2003-2007)	149
*	Midwater trawl (# of hauls)	57
*	Bongo net (# of hauls)	5
*	IKMT (# of hauls)	17
*	Sampling by fishing (# of stations)	2
*	Echo sounder (km: 2005 and 2006 seasons)	2,775

IV-3. OCEANOGRAPHIC DATA - Coastal component off Kushiro

DB	Item	Number of samples
*	Temperature & Salinity (CTD survey: 2002-2007)	109
*	Midwater trawl (no. tow)	133
*	MOCNESS survey (no. tow)	-
*	IKMT survey (no. tow)	6
*	NORPAC net survey (no. tow)	-