

Korea (Republic of). Progress report on cetacean research, January 2009 to December 2009, with statistical data for the *calendar year* 2009

COMPILED BY YONG-ROCK AN, SEOK-GWAN CHOI AND DAE-YEON MOON

*Cetacean Research Institute of National Fisheries Research and Development Institute,
139-29, Maeam-dong, Nam-gu, Ulsan 680-050, Republic of Korea*

This report summarises information obtained from:

Name of agency/institute	Abbreviation (use in rest of report)	Contact e-mail address
Cetacean Research Institute /National Fisheries Research & Development Institute	CRI/NFRDI	rock@nfrdi.go.kr sgchoi@nfrdi.go.kr dymoon@nfrdi.go.kr

1. SPECIES AND STOCKS STUDIED

A tabular format is most appropriate. Please indicate where in the report the species is mentioned and use IWC recommended names (see IWC, 2006, Annex L). For subsequent items, common names are preferred. e.g.:

IWC common name	IWC recommended scientific name	Area/stock(s)	Items referred to
Common minke whale	<i>Balaenoptera acutorostrata</i>	East Sea, Korea Strait, Yellow Sea	2.1; 2.2; 4.2; 4.3; 6.3.2; 8
Bryde's whale	<i>Balaenoptera edeni</i>	Korea Strait	3.1.1; 8
Sperm whale	<i>Physeter macrocephalus</i>	Yellow Sea	4.3; 7.1; 8
Baird's beaked whale	<i>Berardius bairdii</i>	East Sea	8
Killer whale	<i>Orcinus orca</i>	East Sea	4.2; 7.3.2
Melon-headed whale	<i>Peponocephala electra</i>	East Sea	4.3; 8
Long-beaked common dolphin	<i>Delphinus capensis</i>	East Sea	2.1; 2.8; 4.2; 7.3.2; 8
Pacific white-sided dolphin	<i>Lagenorhynchus obliquidens</i>	East Sea	2.1; 7.3.2
Common bottlenose dolphin	<i>Tursiops truncatus</i>	East Sea	7.3.2
Indo-Pacific bottlenose dolphin	<i>Tursiops aduncus</i>	Korea Strait	3.1.1; 7.3.2; 8
Risso's dolphin	<i>Grampus griseus</i>	East Sea	2.1
Harbour porpoise	<i>Phocoena phocoena</i>	East Sea	7.3.2
Dall's porpoise	<i>Phocoenoides dalli</i>	East Sea	2.1; 7.3.2
Finless porpoise	<i>Neophocoena phocaenoides</i>	East Sea, Korea Strait, Yellow Sea	2.1; 4.3; 7.3.2

2. SIGHTINGS DATA

2.1 Field work

2.1.1 Systematic

A systematic sighting survey was conducted using the research vessel, Tamgu 3, in the East Sea from late April to May, 2009. The vessel cruised 1,144n.m. and completed the predetermined transect lines. During the survey, 40 common minke whales were observed in 36 primary sightings and 1,400 long-beaked common dolphins, 4 Risso's dolphins, 13 Dall's porpoises and 6 finless porpoises were observed.

Target species	Date	Area	No. of sightings	Contact person/institute and references
Common minke whale	21/04-28/05/09	East Sea	36	CRI/NFRDI; SC/62/NPM24
Long-beaked common dolphin			4	
Risso's dolphin			2	
Dall's porpoise			7	
Finless porpoise			4	

2.1.2 Opportunistic, platforms of opportunity

None

2.2 Analyses/development of techniques

Target species	Date	Area	Methods/effort	Parameters/ factors measured	Contact person/institute; refs
Common minke whale		East Sea	Line transect survey	Distribution; sighting frequency	CRI/NFRDI; SC/62/NPM16

3. MARKING DATA

None

4. TISSUE/BIOLOGICAL SAMPLES COLLECTED**4.1 Biopsy samples**

None

4.2 Samples from bycatches

Species	Area/stock	Tissue type(s)*	No. collected	Archived (Y/N)	No. analysed	Contact person/institute
Common minke whale	East Sea, Korea Strait, Yellow Sea	Skin, blubber, muscle, liver, lung, intestine	54	Y	54	CRI/NFRDI
Killer whale	East Sea	Skin, blubber, muscle, liver, lung, intestine	1	Y	1	
Long-beaked common dolphin	East Sea	Skin, blubber, muscle, liver, lung, intestine	19	Y	19	

4.3 Samples from stranded animals

Species	Area/stock	Tissue type(s)*	No. collected	Archived (Y/N)	No. analysed	Contact person/institute
Sperm whale	Yellow Sea	Skin, blubber	1	Y	1	CRI/NFRDI
Melon-headed whale	East Sea	Skin, blubber, skeleton	1	Y	1	
Finless porpoise	Korea Strait	Whole carcasses	3	Y	0	

4.4 Analyses/development of techniques

None

5. POLLUTION STUDIES

None

6. STATISTICS FOR LARGE CETACEANS**6.1 Corrections to earlier years' statistics for large whales**

None

6.2 Direct catches of large whales for the calendar year 2009

None

6.3 Anthropogenic mortality of large whales for the calendar year 2009**6.3.1 Observed or reported ship strikes of large whales (including non-fatal events)**

None

6.3.2 Fishery bycatch of large whales

Whale species	Sex	No.	Date	Location	Fate	Targeted fish species	Gear	How observed?	Source or contact
Common minke whale	M	1	08/01	East Sea	D	conger eel, crab, octopus	FPO	M	CRI/NFRDI
Common minke whale	F	1	19/01	Korea Strait	D	mackerel, squid	SX	M	CRI/NFRDI
Common minke whale	M	1	22/01	Yellow Sea	D	not known	NK	M	CRI/NFRDI
Common minke whale	F	1	08/02	East Sea	D	not known	NK	M	CRI/NFRDI
Common minke whale	M	1	01/03	East Sea	D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Common minke whale	F	1	10/03	East Sea	D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Common minke whale	x	1	15/03	East Sea	D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Common minke whale	F	1	16/03	East Sea	D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Common minke whale	F	1	16/03	East Sea	D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Common minke whale	M	1	18/03	East Sea	D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Common minke whale	M	1	31/03	East Sea	D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Common minke whale	M	1	13/04	East Sea	D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Common minke whale	M	1	15/04	East Sea	D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Common minke whale	M	1	24/04	East Sea	D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Common minke whale	F	1	05/05	Korea Strait	D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Common minke whale	F	1	05/05	East Sea	D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Common minke whale	F	1	14/05	East Sea	D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Common minke whale	M	1	19/05	Korea Strait	D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Common minke whale	M	1	24/05	East Sea	D	conger eel, crab, octopus	FPO	M	CRI/NFRDI
Common minke whale	M	1	26/05	East Sea	D	conger eel, crab, octopus	FPO	M	CRI/NFRDI
Common minke whale	M	1	29/05	East Sea	D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Common minke whale	F	1	01/06	Korea Strait	D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Common minke whale	F	1	01/06	Korea Strait	D	mackerel, squid	SX	M	CRI/NFRDI
Common minke whale	F	1	03/06	East Sea	D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Common minke whale	M	1	04/06	East Sea	D	conger eel, crab, octopus	FPO	M	CRI/NFRDI
Common minke whale	F	1	11/06	Yellow Sea	D	conger eel, crab, octopus	FPO	M	CRI/NFRDI
Common minke whale	M	1	12/06	Yellow Sea	D	conger eel, crab, octopus	FPO	M	CRI/NFRDI
Common minke whale	M	1	13/06	East Sea	D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Common minke whale	F	1	13/06	East Sea	D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Common minke whale	M	1	19/06	East Sea	D	conger eel, crab, octopus	FPO	M	CRI/NFRDI

Common minke whale	M	1	23/06	East Sea	D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Common minke whale	M	1	17/07	East Sea	D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Common minke whale	M	1	21/07	Yellow Sea	D	not known	NK	M	CRI/NFRDI
Common minke whale	M	1	05/08	East Sea	D	conger eel, crab, octopus	FPO	M	CRI/NFRDI
Common minke whale	F	1	15/08	East Sea	D	conger eel, crab, octopus	FPO	M	CRI/NFRDI
Common minke whale	F	1	19/08	East Sea	D	conger eel, crab, octopus	FPO	M	CRI/NFRDI
Common minke whale	M	1	22/09	East Sea	D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Common minke whale	F	1	23/09	East Sea	D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Common minke whale	M	1	25/09	East Sea	D	conger eel, crab, octopus	FPO	M	CRI/NFRDI
Common minke whale	F	1	30/09	Yellow Sea	D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Common minke whale	F	1	17/10	East Sea	D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Common minke whale	M	1	19/10	East Sea	D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Common minke whale	F	1	17/11	East Sea	D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Common minke whale	F	1	24/11	East Sea	D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Common minke whale	F	1	25/11	East Sea	D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Common minke whale	F	1	27/11	East Sea	D	conger eel, crab, octopus	FPO	M	CRI/NFRDI
Common minke whale	M	1	30/11	East Sea	D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Common minke whale	M	1	30/11	East Sea	D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Common minke whale	F	1	12/12	East Sea	D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Common minke whale	M	1	12/12	East Sea	D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Common minke whale	F	1	18/12	East Sea	D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Common minke whale	M	1	18/12	East Sea	D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Common minke whale	F	1	25/12	East Sea	D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Common minke whale	M	1	30/12	East Sea	D	flounder, plaice, porgy	GNS	M	CRI/NFRDI

7. STATISTICS FOR SMALL CETACEANS

7.1 Corrections to earlier years' statistics for small cetaceans

None

7.2 Direct catches of small cetaceans for the calendar year 2009

None

7.3 Anthropogenic mortality of small cetaceans for the calendar year 2009

7.3.1 Observed or reported ship strikes of small cetaceans (including non fatal events)

None

7.3.2 Fishery bycatch of small cetaceans

Species	Ratio of male to female (if known)	No.	No. extrapolated to fleet total (point estimate)	Range, CI or CV	Date of bycatch	Location (description or lat/long)	FAO statistical area (if known)	FAO area	Fate	Targeted species	Gear	How observed?	Source or contact
Long-beaked common dolphin	NK	2			03/Jan	East Sea			D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Pacific white-sided dolphin	F	1			03/Jan	East Sea			D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	NK	1			04/Jan	East Sea			D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Long-beaked common dolphin	NK	1			05/Jan	East Sea			D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Long-beaked common dolphin	NK	1			05/Jan	East Sea			D	flounder, porgy, rockfish, greenling	LLS	M	CRI/NFRDI
Finless porpoise	NK	1			07/Jan	East Sea			D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	F	1			07/Jan	East Sea			D	conger eel, crab, octopus	FPO	M	CRI/NFRDI
Long-beaked common dolphin	NK	1			07/Jan	East Sea			D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	F	1			09/Jan	East Sea			D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Harbour porpoise	NK	1			09/Jan	East Sea			D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Finless porpoise	NK	9			09/Jan	Yellow Sea			D	shrimp, gunnel	FSN	M	CRI/NFRDI
Harbour porpoise	NK	1			16/Jan	East Sea			D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Pacific white-sided dolphin	F	1			16/Jan	East Sea			D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Harbour porpoise	F	1			16/Jan	East Sea			D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Harbour porpoise	NK	2			16/Jan	East Sea			D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Harbour porpoise	M	1			16/Jan	East Sea			D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Harbour porpoise	M	1			16/Jan	East Sea			D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Harbour porpoise	M	1			16/Jan	East Sea			D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Harbour porpoise	NK	1			16/Jan	East Sea			D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	NK	1			16/Jan	East Sea			D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Harbour porpoise	M	1			17/Jan	East Sea			D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Harbour porpoise	F	1			17/Jan	East Sea			D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Killer whale	NK	1			17/Jan	East Sea			D	conger eel, crab, octopus	FPO	M	CRI/NFRDI
Harbour porpoise	NK	1			17/Jan	East Sea			D	flounder, porgy, rockfish, greenling	LLS	M	CRI/NFRDI
Harbour porpoise	F	1			18/Jan	East Sea			D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Harbour porpoise	M	1			18/Jan	East Sea			D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Pacific white-sided dolphin	M	1			18/Jan	East Sea			D	conger eel, crab, octopus	FPO	M	CRI/NFRDI
Harbour porpoise	M	1			19/Jan	East Sea			D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Harbour porpoise	F	1			20/Jan	East Sea			D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Finless porpoise	M	1			20/Jan	East Sea			D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Finless porpoise	NK	1			21/Jan	East Sea			D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Finless porpoise	NK	1			22/Jan	East Sea			D	flounder, plaice,	GNS	M	CRI/NFRDI

Harbour porpoise	M	1		18/Feb	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Harbour porpoise	F	1		19/Feb	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Harbour porpoise	M	1		21/Feb	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Finless porpoise	NK	1		21/Feb	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	F	1		22/Feb	East Sea		D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Harbour porpoise	F	1		22/Feb	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Finless porpoise	NK	1		22/Feb	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Finless porpoise	NK	1		22/Feb	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	M	1		22/Feb	East Sea		D	conger eel, crab, octopus	FPO	M	CRI/NFRDI
Long-beaked common dolphin	NK	13		22/Feb	East Sea		D		NK	M	CRI/NFRDI
Long-beaked common dolphin	M	1		23/Feb	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	M	1		24/Feb	East Sea		D	conger eel, crab, octopus	FPO	M	CRI/NFRDI
Finless porpoise	NK	1		25/Feb	Korea Strait		D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Long-beaked common dolphin	F	1		27/Feb	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	F	1		28/Feb	East Sea		D	flounder, porgy, rockfish, greenling	LLS	M	CRI/NFRDI
Indo-Pacific bottlenose dolphin	NK	1		02/Mar	Korea Strait		D	mackerel, jack mackerel	TX	M	CRI/NFRDI
Indo-Pacific bottlenose dolphin	NK	1		02/Mar	Korea Strait		D	mackerel, jack mackerel	TX	M	CRI/NFRDI
Finless porpoise	NK	1		04/Mar	Korea Strait		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	M	1		04/Mar	East Sea		D	conger eel, crab, octopus	FPO	M	CRI/NFRDI
Finless porpoise	NK	1		04/Mar	Korea Strait		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Harbour porpoise	M	1		08/Mar	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Harbour porpoise	F	1		08/Mar	East Sea		D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Finless porpoise	NK	1		08/Mar	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	M	1		09/Mar	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	NK	1		10/Mar	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	NK	1		10/Mar	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	NK	3		10/Mar	East Sea		D		NK	M	CRI/NFRDI
Long-beaked common dolphin	M	1		11/Mar	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Finless porpoise	F	1		11/Mar	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	NK	1		12/Mar	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Pacific white-sided dolphin	F	1		12/Mar	East Sea		D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Finless porpoise	M	1		12/Mar	Korea Strait		D	mackerel, jack mackerel	TX	M	CRI/NFRDI
Finless porpoise	NK	1		13/Mar	Korea Strait		D	shrimp, gummel	FSN	M	CRI/NFRDI
Finless porpoise	NK	5		15/Mar	Korea Strait		D	mackerel, jack mackerel	TX	M	CRI/NFRDI

Long-beaked common dolphin	F	1		16/Mar	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	F	1		16/Mar	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Finless porpoise	NK	1		16/Mar	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Finless porpoise	NK	1		16/Mar	East Sea		D	mackerel, jack mackerel	TX	M	CRI/NFRDI
Long-beaked common dolphin	F	1		18/Mar	East Sea		D	conger eel, crab, octopus	FPO	M	CRI/NFRDI
Long-beaked common dolphin	NK	1		18/Mar	East Sea		D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Long-beaked common dolphin	M	1		19/Mar	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	F	1		21/Mar	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Finless porpoise	NK	3		23/Mar	Korea Strait		D	mackerel, jack mackerel	TX	M	CRI/NFRDI
Harbour porpoise	F	1		24/Mar	East Sea		D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Finless porpoise	F	1		24/Mar	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Finless porpoise	NK	1		25/Mar	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	NK	3		26/Mar	East Sea		D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Harbour porpoise	M	1		26/Mar	East Sea		D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Long-beaked common dolphin	NK	2		26/Mar	East Sea		D		NK	M	CRI/NFRDI
Long-beaked common dolphin	NK	1		28/Mar	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	F	1		29/Mar	East Sea		D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Finless porpoise	NK	2		30/Mar	Korea Strait		D	mackerel, jack mackerel	TX	M	CRI/NFRDI
Finless porpoise	NK	1		30/Mar	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Finless porpoise	NK	6		30/Mar	Korea Strait		D	mackerel, jack mackerel	TX	M	CRI/NFRDI
Harbour porpoise	F	1		01/Apr	East Sea		D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Finless porpoise	NK	7		02/Apr	Korea Strait		D	mackerel, jack mackerel	TX	M	CRI/NFRDI
Harbour porpoise	M	1		03/Apr	East Sea		D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Long-beaked common dolphin	NK	1		03/Apr	East Sea		D	conger eel, crab, octopus	FPO	M	CRI/NFRDI
Long-beaked common dolphin	F	1		04/Apr	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	NK	1		04/Apr	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	M	1		06/Apr	East Sea		D	conger eel, crab, octopus	FPO	M	CRI/NFRDI
Long-beaked common dolphin	F	1		07/Apr	East Sea		D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Long-beaked common dolphin	F	1		07/Apr	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	NK	1		08/Apr	East Sea		D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Long-beaked common dolphin	NK	1		09/Apr	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	F	1		09/Apr	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	M	1		11/Apr	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	NK	1		12/Apr	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI

Long-beaked common dolphin	NK	1		28/Apr	East Sea		D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Long-beaked common dolphin	NK	1		29/Apr	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	F	1		01/May	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Indo-Pacific bottlenose dolphin	NK	2		01/May	Korea Strait		R	amberjack, herring, squid	FYK	M	CRI/NFRDI
Finless porpoise	NK	1		02/May	Korea Strait		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	NK	1		03/May	East Sea		D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Long-beaked common dolphin	NK	1		03/May	East Sea		D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Long-beaked common dolphin	M	1		05/May	East Sea		D	conger eel, crab, octopus	FPO	M	CRI/NFRDI
Finless porpoise	NK	1		05/May	Korea Strait		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	NK	1		06/May	East Sea		D	conger eel, crab, octopus	FPO	M	CRI/NFRDI
Finless porpoise	NK	1		07/May	Korea Strait		D	mackerel, jack mackerel	TX	M	CRI/NFRDI
Long-beaked common dolphin	NK	3		09/May	East Sea		D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Indo-Pacific bottlenose dolphin	NK	3		10/May	Korea Strait		D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Pacific white-sided dolphin	M	1		11/May	East Sea		D	flounder, porgy, rockfish, greenling	LLS	M	CRI/NFRDI
Long-beaked common dolphin	NK	1		15/May	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	NK	1		15/May	East Sea		D	conger eel, crab, octopus	FPO	M	CRI/NFRDI
Finless porpoise	NK	2		17/May	Korea Strait		D	mackerel, jack mackerel	TX	M	CRI/NFRDI
Long-beaked common dolphin	NK	1		19/May	East Sea		D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Long-beaked common dolphin	F	1		19/May	East Sea		D	conger eel, crab, octopus	FPO	M	CRI/NFRDI
Finless porpoise	NK	1		20/May	Korea Strait		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	M	1		20/May	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	F	1		20/May	East Sea		D	conger eel, crab, octopus	FPO	M	CRI/NFRDI
Long-beaked common dolphin	NK	1		23/May	East Sea		D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Finless porpoise	NK	1		26/May	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Finless porpoise	NK	1		26/May	East Sea		D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Long-beaked common dolphin	NK	2		27/May	East Sea		D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Finless porpoise	NK	1		30/May	Korea Strait		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Finless porpoise	NK	4		02/Jun	Korea Strait		D	mackerel, jack mackerel	TX	M	CRI/NFRDI
Finless porpoise	NK	1		03/Jun	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Finless porpoise	NK	3		04/Jun	Korea Strait		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	F	1		04/Jun	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Finless porpoise	NK	1		11/Jun	Korea Strait		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Finless porpoise	NK	1		12/Jun	Korea Strait		D	mackerel, jack mackerel	TX	M	CRI/NFRDI
Finless porpoise	NK	1		12/Jun	Korea Strait		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI

Long-beaked common dolphin	M	1		12/Jun	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	M	1		14/Jun	East Sea		D	conger eel, crab, octopus	FPO	M	CRI/NFRDI
Long-beaked common dolphin	M	1		15/Jun	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	F	1		16/Jun	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Finless porpoise	NK	1		16/Jun	Korea Strait		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	F	1		16/Jun	East Sea		D	conger eel, crab, octopus	FPO	M	CRI/NFRDI
Long-beaked common dolphin	F	1		16/Jun	East Sea		D	conger eel, crab, octopus	FPO	M	CRI/NFRDI
Long-beaked common dolphin	M	1		21/Jun	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Indo-Pacific bottlenose dolphin	NK	2		24/Jun	Korea Strait		R	amberjack, herring, squid	FYK	M	CRI/NFRDI
Pacific white-sided dolphin	M	1		01/Jul	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Pacific white-sided dolphin	M	1		01/Jul	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Finless porpoise	NK	1		02/Jul	Korea Strait		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Pacific white-sided dolphin	M	1		02/Jul	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	M	1		02/Jul	East Sea		D	conger eel, crab, octopus	FPO	M	CRI/NFRDI
Finless porpoise	NK	1		08/Jul	Korea Strait		D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Long-beaked common dolphin	NK	1		09/Jul	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	NK	1		11/Jul	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	M	1		13/Jul	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Finless porpoise	NK	2		14/Jul	Korea Strait		D	mackerel, squid	SX	M	CRI/NFRDI
Long-beaked common dolphin	NK	1		14/Jul	East Sea		D	conger eel, crab, octopus	FPO	M	CRI/NFRDI
Finless porpoise	NK	1		14/Jul	Korea Strait		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Finless porpoise	NK	2		15/Jul	Korea Strait		D	mackerel, jack mackerel	TX	M	CRI/NFRDI
Long-beaked common dolphin	M	1		16/Jul	East Sea		D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Finless porpoise	NK	3		17/Jul	Korea Strait		D	mackerel, jack mackerel	TX	M	CRI/NFRDI
Long-beaked common dolphin	F	1		17/Jul	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	M	1		17/Jul	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Finless porpoise	NK	1		17/Jul	Korea Strait		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Finless porpoise	NK	1		17/Jul	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	M	1		19/Jul	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Finless porpoise	NK	1		19/Jul	Korea Strait		D	amberjack, herring, squid	FYK	M	CRI/NFRDI
Long-beaked common dolphin	NK	1		20/Jul	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Finless porpoise	NK	2		20/Jul	Korea Strait		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Long-beaked common dolphin	F	1		20/Jul	East Sea		D	flounder, plaice, porgy	GNS	M	CRI/NFRDI
Finless porpoise	NK	3		21/Jul	Korea Strait		D	mackerel, jack mackerel	TX	M	CRI/NFRDI
Long-beaked common	NK	2		21/Jul	East Sea		D	flounder, plaice,	GNS	M	CRI/NFRDI

dolphin										<i>squid</i>			
Long-beaked common dolphin	M	1			30/Oct	East Sea			D	<i>amberjack, herring, squid</i>	FYK	M	CRI/NFRDI
Long-beaked common dolphin	M	1			30/Oct	East Sea			D	<i>amberjack, herring, squid</i>	FYK	M	CRI/NFRDI
Long-beaked common dolphin	F	1			05/Nov	East Sea			D	<i>amberjack, herring, squid</i>	FYK	M	CRI/NFRDI
Long-beaked common dolphin	NK	2			08/Nov	East Sea			D	<i>amberjack, herring, squid</i>	FYK	M	CRI/NFRDI
Long-beaked common dolphin	F	1			08/Nov	East Sea			D	<i>amberjack, herring, squid</i>	FYK	M	CRI/NFRDI
Long-beaked common dolphin	NK	1			09/Nov	East Sea			D	<i>amberjack, herring, squid</i>	FYK	M	CRI/NFRDI
Long-beaked common dolphin	NK	1			09/Nov	East Sea			D	<i>flounder, plaice, porgy</i>	GNS	M	CRI/NFRDI
Long-beaked common dolphin	NK	1			14/Nov	East Sea			D	<i>flounder, plaice, porgy</i>	GNS	M	CRI/NFRDI
Long-beaked common dolphin	NK	1			16/Nov	East Sea			D	<i>flounder, plaice, porgy</i>	GNS	M	CRI/NFRDI
Finless porpoise	NK	2			17/Nov	Korea Strait			D	<i>mackerel, jack mackerel</i>	TX	M	CRI/NFRDI
Long-beaked common dolphin	NK	1			17/Nov	East Sea			D	<i>conger eel, crab, octopus</i>	FPO	M	CRI/NFRDI
Long-beaked common dolphin	F	1			17/Nov	East Sea			D	<i>flounder, plaice, porgy</i>	GNS	M	CRI/NFRDI
Long-beaked common dolphin	F	1			20/Nov	East Sea			D	<i>amberjack, herring, squid</i>	FYK	M	CRI/NFRDI
Finless porpoise	NK	1			20/Nov	East Sea			D	<i>flounder, plaice, porgy</i>	GNS	M	CRI/NFRDI
Long-beaked common dolphin	F	1			21/Nov	East Sea			D	<i>flounder, porgy, rockfish, greenling</i>	LLS	M	CRI/NFRDI
Long-beaked common dolphin	M	1			22/Nov	East Sea			D	<i>flounder, plaice, porgy</i>	GNS	M	CRI/NFRDI
Long-beaked common dolphin	F	1			23/Nov	East Sea			D	<i>flounder, plaice, porgy</i>	GNS	M	CRI/NFRDI
Long-beaked common dolphin	F	1			24/Nov	East Sea			D	<i>amberjack, herring, squid</i>	FYK	M	CRI/NFRDI
Long-beaked common dolphin	NK	2			24/Nov	East Sea			D	<i>amberjack, herring, squid</i>	FYK	M	CRI/NFRDI
Long-beaked common dolphin	M	1			25/Nov	East Sea			D	<i>amberjack, herring, squid</i>	FYK	M	CRI/NFRDI
Long-beaked common dolphin	NK	2			25/Nov	East Sea			D	<i>amberjack, herring, squid</i>	FYK	M	CRI/NFRDI
Long-beaked common dolphin	NK	1			25/Nov	East Sea			D	<i>amberjack, herring, squid</i>	FYK	M	CRI/NFRDI
Long-beaked common dolphin	NK	1			26/Nov	East Sea			D	<i>amberjack, herring, squid</i>	FYK	M	CRI/NFRDI
Finless porpoise	NK	1			26/Nov	Korea Strait			D	<i>flounder, plaice, porgy</i>	GNS	M	CRI/NFRDI
Long-beaked common dolphin	NK	7			27/Nov	East Sea			D	<i>amberjack, herring, squid</i>	FYK	M	CRI/NFRDI
Long-beaked common dolphin	F	1			05/Dec	East Sea			D	<i>amberjack, herring, squid</i>	FYK	M	CRI/NFRDI
Long-beaked common dolphin	F	1			07/Dec	East Sea			D	<i>amberjack, herring, squid</i>	FYK	M	CRI/NFRDI
Long-beaked common dolphin	NK	2			07/Dec	East Sea			D	<i>amberjack, herring, squid</i>	FYK	M	CRI/NFRDI
Finless porpoise	NK	1			07/Dec	East Sea			D	<i>flounder, plaice, porgy</i>	GNS	M	CRI/NFRDI
Long-beaked common dolphin	M	1			08/Dec	East Sea			D	<i>amberjack, herring, squid</i>	FYK	M	CRI/NFRDI
Pacific white-sided dolphin	NK	2			08/Dec	East Sea			D	<i>amberjack, herring, squid</i>	FYK	M	CRI/NFRDI
Long-beaked common dolphin	M	1			08/Dec	East Sea			D	<i>conger eel, crab, octopus</i>	FPO	M	CRI/NFRDI
Long-beaked common dolphin	NK	3			10/Dec	East Sea			D	<i>amberjack, herring, squid</i>	FYK	M	CRI/NFRDI
Long-beaked	M	1			12/Dec	East Sea			D	<i>amberjack,</i>	FYK	M	CRI/NFRDI

dolphin				
Finless porpoise	58	0		

9. OTHER STUDIES AND ANALYSES

None

10. LITERATURE CITED

None

11. PUBLICATIONS

None