

## Appendix 1

List of data collected by the NEWREP-A 2015/16.

Items	Data
Whale abundance estimate*	
Weather data***	115 days
Effort data***	115 days
Sighting record of whales***	1,472 schools
Angle and distance experiments***	320 times
Ice edge line ***	115°E–170°W
Environmental data	
Temperature and salinity profile (CTD)**	37 stations
Echo sound (krill distribution/abundance)**	31 days
Marine debris (sea surface)	0 observation
Antarctic minke whale*	
Catching date and location***	333 individuals
Photographic record of external character	333 individuals
Record of internal and external parasites	333 individuals
Sex and body length***	333 individuals
Body proportion for stock structure*	333 individuals
Skull measurements (length and breadth) for stock structure*	310 individuals
Satellite tracking for stock structure and feeding ecology*	3 individuals
Body weight for feeding ecology**	333 individuals
Organ weight including fat weight for feeding ecology**	5 individuals
Diatom film record for feeding ecology**	333 individuals
Blubber thickness for feeding ecology**	333 individuals
Stomach content: freshness and weight for feeding ecology**	333 individuals
Diving behaviour for feeding ecology**	–
Testis weight for reproductive study***	103 individuals
Mammary gland: lactation status and measurement for reproductive study	230 individuals
Foetal number, sex, length and weight for reproductive study	158 individuals
Marine debris (stomach)	0 individuals
Gross pathological observation and sampling	333 individuals
Other large whales	
Photo-ID	82 individuals

\* Data or samples to be used for Main Objective I; \*\* data or samples to be used for Main Objective II (Other items will be used for other research purposes); \*\*\* data or samples to be used for Main Objectives I and II.

List of sample collected by the NEWREP-A 2015/16.

Items	Sample
Antarctic minke whale*	
Prey species in stomach for feeding ecology**	47 individuals
Faeces and contents from the large intestine for feeding ecology**	0 individuals
Testis for reproductive study***	103 individuals
Ovary for corpora counting and reproductive study***	230 individuals
Mammary gland and endometrium for reproductive study	230 individuals

Earplug for age determination***	333 individuals
Ocular lens for age determination***	333 individuals
Baleen plates for age determination and stable isotope study***	26 individuals
Tissue samples for genetic study***	333 individuals
Tissue and organ samples for chemical study***	333 individuals
Tissue and plasma samples for physiological study***	333 individuals
Vertebral epiphyses for physical maturity	307 individuals
Skin sample (biopsy)	10 individuals
Other large whales Skin sample (biopsy)	40 individuals

\* Data or samples to be used for Main Objective I; \*\* data or samples to be used for Main Objective II (Other items will be used for other research purposes); \*\*\* data or samples to be used for Main Objective I and II.

Number of total sighted whales in the NEWREP-A 2015/16 (school / individual).

Species	Transit to RA		Research area				Transit from RA		Sub total				Total					
	Primary		Secondary		Primary		Secondary		Primary		Secondary		Total					
	y		y		y		y		y		y							
	Sch.	Ind.	Sch.	Ind.	Sch.	Ind.	Sch.	Ind.	Sch.	Ind.	Sch.	Ind.	Sch.	Ind.				
Blue whale	0	0	0	0	14	25	6	9	0	0	2	2	14	25	8	11	22	36
Fin whale	2	2	0	0	14	37	10	25	0	0	0	0	16	39	10	25	26	64
Sei whale	1	2	0	0	0	0	0	0	4	4	0	0	5	6	0	0	5	6
Antarctic minke whale	1	1	0	0	476	1,339	80	219	0	0	3	4	477	1,340	83	223	560	1,563
Like Antarctic minke whale	0	0	0	0	7	7	0	0	0	0	0	0	7	7	0	0	7	7
Humpback whale	0	0	0	0	525	1,128	136	302	0	0	7	22	525	1,128	143	324	668	1,452
Southern right whale	0	0	0	0	1	1	0	0	0	0	1	1	1	1	1	1	2	2
Baleen whale	0	0	2	2	18	24	2	2	0	0	0	0	18	24	4	4	22	28
Sperm whale	4	4	0	0	19	19	2	2	0	0	2	2	23	23	4	4	27	27
Southern bottlenose whale	0	0	0	0	2	4	0	0	0	0	0	0	2	4	0	0	2	4
Arnoux's beaked whale	0	0	0	0	2	20	1	7	0	0	0	0	2	20	1	7	3	27
Unid. beaked whale	1	2	1	3	15	17	2	2	4	5	0	0	20	24	3	5	23	29
Killer whale	0	0	0	0	26	241	3	18	0	0	0	0	26	241	3	18	29	259

Number of photo-identified whales and number of biopsies in the NEWREP-A 2015/16.

Species	No. of individuals photographed	No. of biopsy individuals collected
Blue whale	24	8
Fin whale	0	7
Humpback whale	36	15
Southern right whale	1	1
Killer whale	21	9
Total	82	40