

Critical gaps in current knowledge
(Chairman, SACLANTCEN Marine Mammal Environmental Policy and
Mitigation Procedures Panel)

•	Animal hearing
•	Audiograms for small captive animals only
•	Need to investigate the beaked whales
•	Need to investigate the baleen whales
•	Possible to infer audiogram from anatomical studies

•	Animal sounds
•	Need to document sounds produced by beaked whales and other species
•	Need to understand use made of sounds

•	Distribution
•	Need to identify areas to avoid
•	Need to identify areas of low usage
•	Need to know normal distribution

•	'Normal' behaviour
•	To identify changes in behaviour we need to know what normal behaviour is
•	We need to understand the causes of variations in this behaviour

Marine Mammal Sequence					
SL	Pulse length	Wave type	BW	Rep Per	Time from start
160	3	LFM	200 Hz	10	0 – 2
170	3	LFM	200 Hz	20	2 – 5
180	3	LFM	200 Hz	30	5 – 10
190	3	LFM	200 Hz	45	10 – 15
200	4	LFM	300 Hz	60	15 – 20
210	5	LFM	600 Hz	60	20 – 25
220	5	LFM	600 Hz	90	25 – 30