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Assessment of impacts and potential mitigation for icebreaking vessels transiting pupping areas of an ice-breeding seal

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Supplementary material: Appendix B

Tables B1 – B3

Table B1. Icebreaking vessels from which observations were made 2006–13.

Vessel type	Dimensions	Deadweight	Draught	Survey transits 2006–13
A	76x16m	500 t	2.8m	1 (2006) 3 (2011) 10 (2012) 2 (2013)
B	66x16m	675 t	2.9m	1 (2008) 1 (2010) 3 (2011)
C	94x21m	4000 t	2.6m	1 (2008) 1 (2009) 3 (2010) 5 (2012)
D	66x16m	743 t	2.5m	8 (2012)

Table B2**.** Proportion of MPs and LPs displaced at different distances to the side of vessel (SoV). 'Displaced' is defined as all movement of seals for any distance in response to vessel passage (i.e. any movement from original position of MPs or LPs, separation of MPs and any seal shifting resting position; data from all years).

Distance SoV (m)	**Number of pairs**	**MPs Displaced**	**% Displaced**	**Number of Lone pups**	**LPs Displaced**	**% Displaced**
<10	213	208	98	77	72	95
10–49	95	84	88	49	42	86
50–99	76	57	75	16	11	69
100–199	88	50	57	17	5	29

Table B3. Summary of vessel responses during vessel-seal encounters.

	Vessel Types			
Vessel-seal encounters	**A**	**B**	**C**	**D**
<10m SoV – encounters with speed record	33	39	11	11
Average prior speed (kn) (*SD*)	5.8 (*1.7*)	3.8 (*2.2*)	6.0 (*0.9*)	3.7 (*1.7*)
Average encounter Speed (kn) (*SD*)	3.9 (*3.2*)	2.1 (*2.4*)	5.8 (*1.2*)	1.8 (*2.7*)
Total collisions over all transits <10m SoV	12	2	4	2
10–49m SoV – encounters with speed record	4	26	54	24
Average prior speed (kn) (SD)	6.4 (*1.2*)	4.2 (*2.0*)	5.3 (*2.4*)	2.6 (*1.6*)
Average encounter speed (kn) (SD)	5.6 (*1.8*)	3.1 (*2.3*)	5.1 (*2.4*)	1.5 (*1.8*)