

Supplemental Materials

Eric Keen et al.

8/15/2022

Table 1: Best-fitting density surface models for fin whales and humpback whales for mid-June – early-September.

Species	Formula	Trunc. dist.	Family	Link function	Delta AIC	Deviance explained
Fin whale	(Lat x Lon) + seafloor depth + seafloor range	2.0 km	Tweedie	log	104	54%
Humpback whale	(Lat x Lon x DOY) + seafloor depth + seafloor range + year	2.7 km	Tweedie	log	14	51%

Table 2: Fin whale density (95% confidence interval) by waterway (whales per square km), , as estimated from the best-fitting density surface model. Confidence intervals are estimated using a bootstrap procedure.

Waterway	Season
Caamano	0.022 (0-0.126)
Campania	0.024 (0-0.148)
Estevan	0 (0-0)
McKay	0 (0-0)
Squally	0.031 (0-0.169)
Verney	0 (0-0)
Whale	0 (0-0)
Wright	0 (0-0)
Study area	0.014 (0-0.118)

Table S1.x. Dimensions of the LNG Canada fleet, adapted from TERMPOL (2015). Note that in our analyses, we reduced the max Shell length to 298m, and the beam was adjusted according to the original length:beam ratio.

Joint Venture Partner	Capacity (m ³)	DWT	Gross Tonnage	Length (m)	Breadth (m)	Draught (m)
SHELL	170,000	86,000	109,000	290	45	12.0m
	215,000	107,000	136,000	315	50	12.0m
KOGAS	165,000	82,000	104,000	286	43	11.9m
MITSUBISHI	150,000	85,000	100,000	288	44	11.5m
CNPC	130,000	71,000	85,000	286	41	11.8m