APPENDIX D

Mass (M)

Adult female mass was estimated using the equation: $M = bL^3$ (Rice and Wolman 1971), based on weights from nine gray whales, from neonates to adults, where $b = 12.43 \pm 1.56$. The value of b was calculated from lengths and girths of 27 southbound recently ovulated gray whales (Rice and Wolman 1971). Data for L was obtained from 107 harvested recently ovulated/early pregnant, anestrous and late pregnant/post-partum adult female gray whales (Rice and Wolman 1971).

Data to estimate calves' mass from Eq. 4 ($M = 28.5 \cdot G^{1.17} \cdot L^{1.73}$) (main text) was obtained from 12 sets of weight, length and girth from a 3-63 weeks of age captive gray whale ("JJ") (Sumich et al. 2001).

The girth-to-length ratio for newborn calves was based on data obtained from five live neonates (Norris and Gentry 1974, Sumich 1986) and data for the girth-to-length ratio for older calves was obtained from measurements of a captive gray whale ("Gigi II") at two and 14 months of age ((Sumich 1986) and (J. L. Sumich, *unpublished*)). Length was estimated as previously described in *Tidal lung volume* section.

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