## **Bottlenose Dolphin**

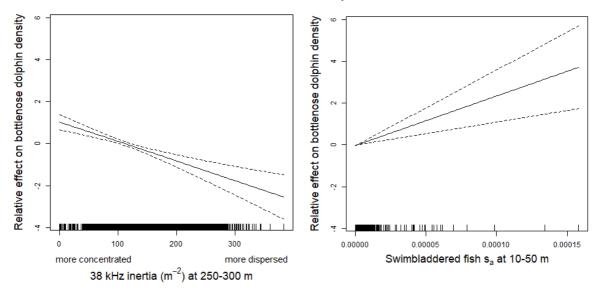


Fig. S1. Generalized Additive Model plots showing the relationship between bottlenose dolphin density and the 38 kHz inertia at 250–300 m (left) and the area backscattering coefficient ( $s_a$ ) (m<sup>2</sup> m<sup>-2</sup>) at 10–50 m (right).

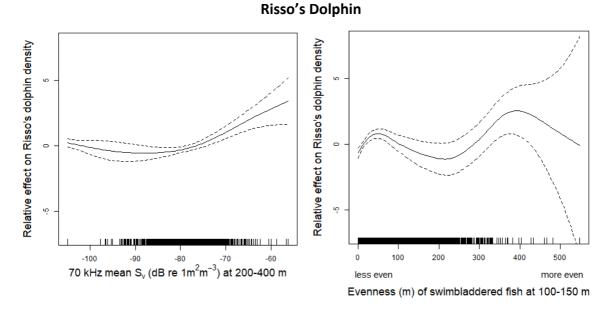


Fig. S2. Generalized Additive Model plots showing the relationship between Risso's dolphin density and 70 kHz mean volume-backscattering strength ( $S_v$ ) (dB re 1m<sup>-1</sup>) at 200–400 m (left) and evenness of swimbladdered fish at 0–50 m (right).

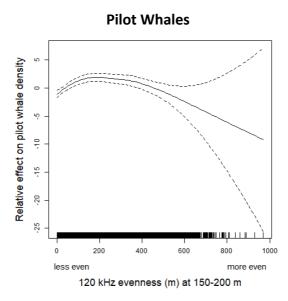
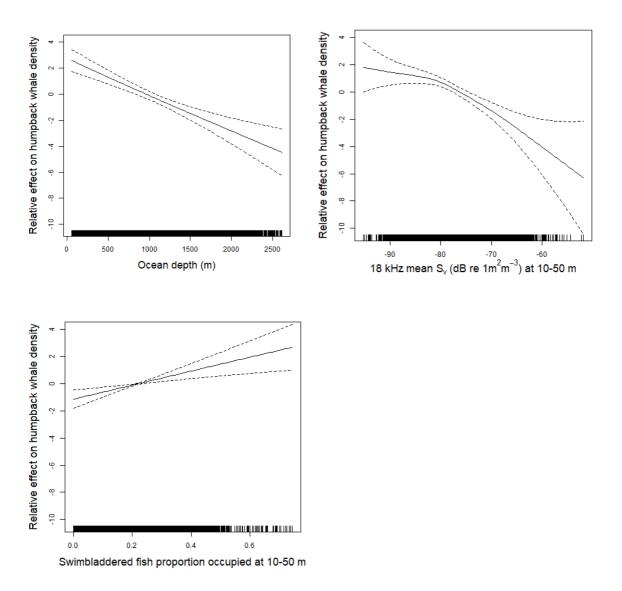


Fig. S3. Generalized Additive Model plot showing the relationship between pilot whale density and the 120 kHz evenness at 150–200 m.



**Humpback Whale** 

Fig. S4. Generalized Additive Model plots showing the relationship between humpback whale density and ocean depth (m) (top left), the 18 kHz mean volume-backscattering strength ( $S_v$ ) (dB re 1m<sup>-1</sup>) at 10–50 m (top right), and the proportion of area occupied with swimbladdered fish at 10–50 m (bottom left).



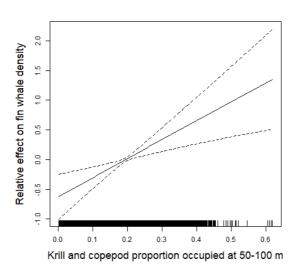
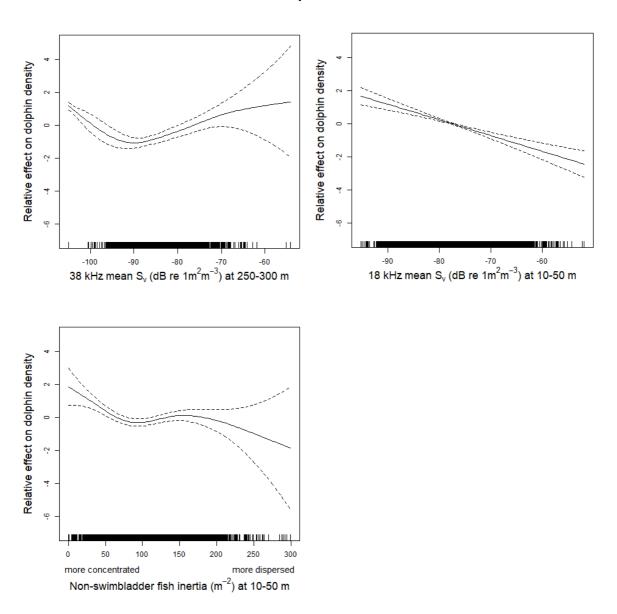


Fig. S5. Generalized Additive Model plot showing the relationship between fin whale showing density and the krill and copepod proportion occupied at 50–100 m in a model that also included ocean depth.



**Dolphin Guild** 

Fig. S6. Generalized Additive Model plots showing the relationship between dolphin feeding guild density and the 38 kHz mean volume-backscattering strength ( $S_v$ ) (dB re 1 m<sup>2</sup>m<sup>-3</sup>) at 250–300 m (top left), the 18 kHz mean volume-backscattering strength ( $S_v$ ) (dB re 1 m<sup>2</sup>m<sup>-3</sup>) at 10-50 m (top right), and non-swimbladder fish inertia (m<sup>-2</sup>) at 10–50 m (bottom left).

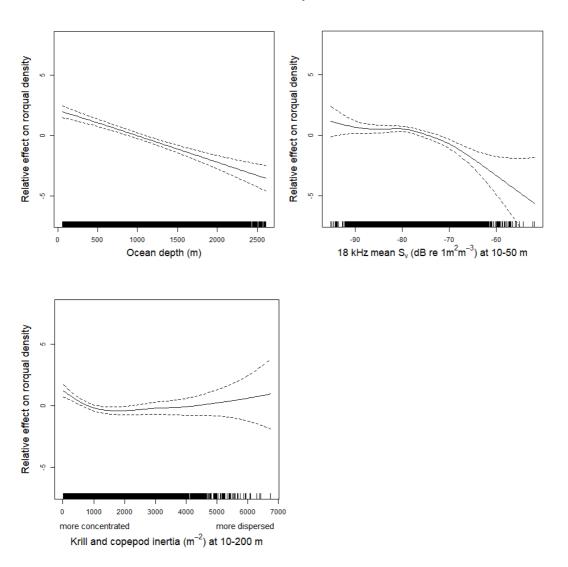


Fig. S7. Generalized Additive Model plots showing the relationship between rorqual whale feeding guild density and ocean depth (m) (top left), the 18 kHz mean volume-backscattering strength ( $S_{\nu}$ ) (dB re 1 m<sup>2</sup>m<sup>-3</sup>) at 10–50 m (top right), and the krill and copepod inertia (m<sup>-2</sup>) at 10–200 m (bottom left).

## **Rorqual Guild**

## **Deep Divers Guild**

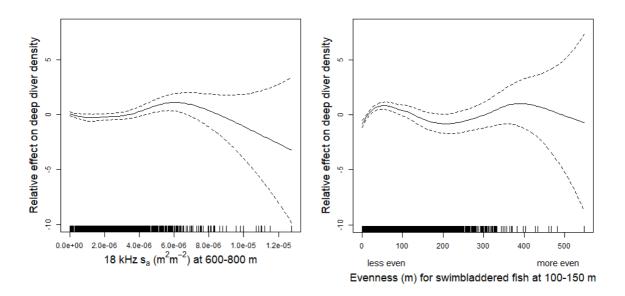


Fig. S8. Generalized Additive Model plots showing the relationship between deep divers feeding guild density showing the relationship with 18 kHz  $s_a$  (m<sup>2</sup> m<sup>-2</sup>) at 600–800 m (top left), and the evenness (m) of swimbladdered fish at 100–50 m (top right).

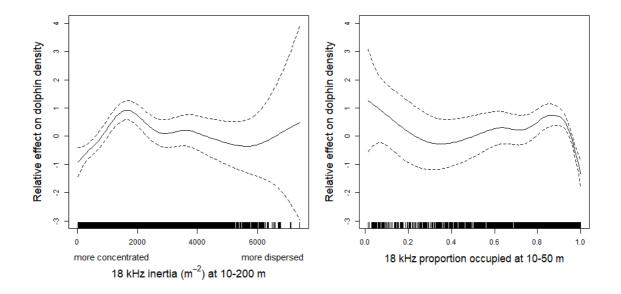


Fig. S9. Generalized Additive Model plots showing the relationship between dolphin feeding guild density with 18 kHz inertia (m<sup>-2</sup> at 10–200 m (top left), and 18 kHz proportion occupied at 10–50 m (top right). These variables were evaluated after including the 38 kHz mean volume-backscattering strength ( $S_v$ ) (dB re 1 m<sup>2</sup> m<sup>-3</sup>) at 250–300 m as the first variable chosen in the dolphin guild model. The inertia plot shows a peak at more concentrated areas, while the proportion occupied plot shows a negative relationship in areas fully occupied by 18 kHz returns.