OPEN ACCESS

University of BRISTOL

Publisher's PDF, also known as Version of record

Link to published version (if available):
10.1038/s41598-017-06515-2

Link to publication record in Explore Bristol Research

PDF-document

University of Bristol - Explore Bristol Research

General rights

Motorboat noise disrupts co-operative interspecific interactions

Sophie L. Nedelec, Suzanne C. Mills, Andrew N. Radford, Ricardo Beldade, Stephen D. Simpson, Brendan Nedelec and Isabelle M. Côté
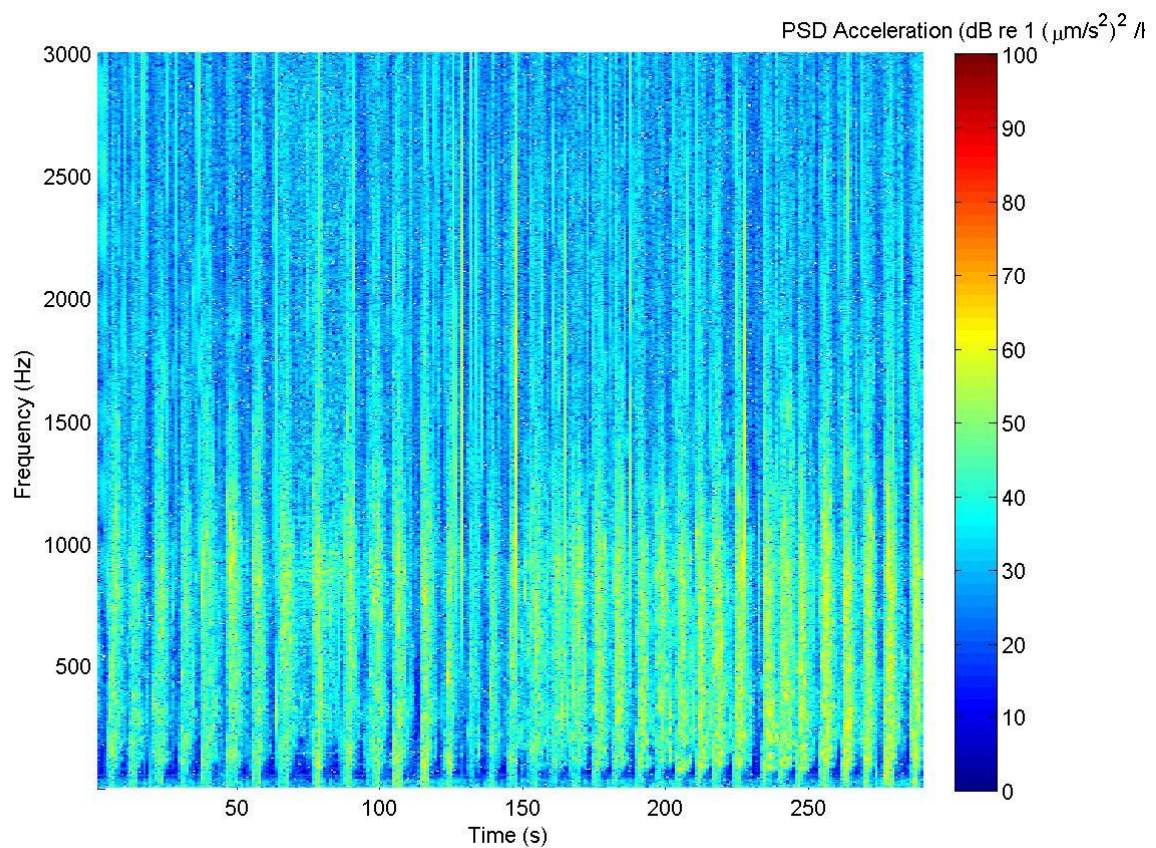

Figure S1. Monoaxial (x-axis – horizontal) particle acceleration spectrogram of a recording made at 4 m depth, 50 cm from a bluestreak cleaner wrasse on a coral wall with a SCUBA diver 1-2 m away. FFT length = 44100, time window = 1 s.

Figure S2. Monoaxial (x-axis – horizontal) particle acceleration spectrogram recorded 50 cm from a juvenile bluestreak cleaner wrasse at 4 m depth on a coral wall with a SCUBA diver present 1–2 m away while an outboard motor boat with a 40 hp engine was driven past multiple times at 10–50 m. FFT length = 44100, time window = 1 s.

Figure S3. Spectrogram of sound pressure recording made at 4 m depth, 50 cm from a bluestreak cleaner wrasse on a coral wall with a SCUBA diver 1–2 m away. FFT length = 44100, time window = 1 s.
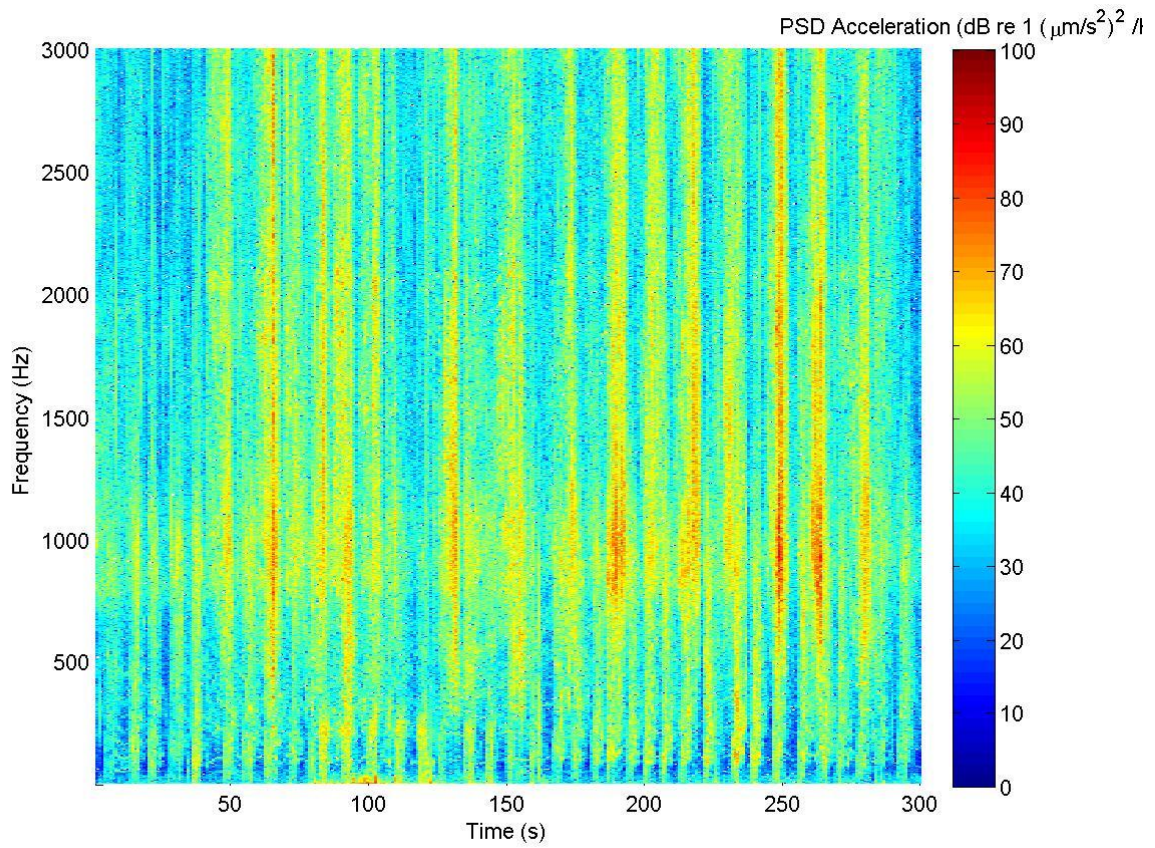
Figure S4. Spectrogram of sound pressure recorded 50 cm from a juvenile bluestreak cleaner wrasse at 4 m depth on a coral wall with a SCUBA diver present 1–2 m away while an outboard motor boat with a 40 hp engine was driven past multiple times at 10–50 m. FFT length = 44100, time window = 1 s.
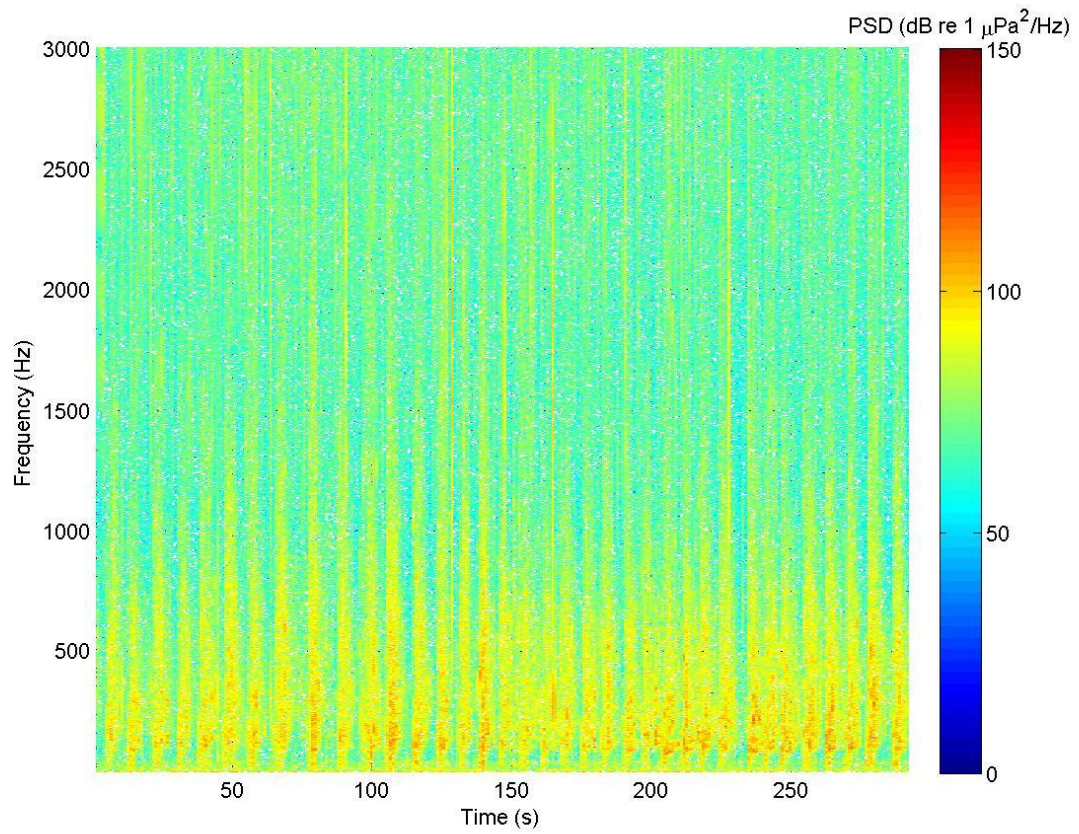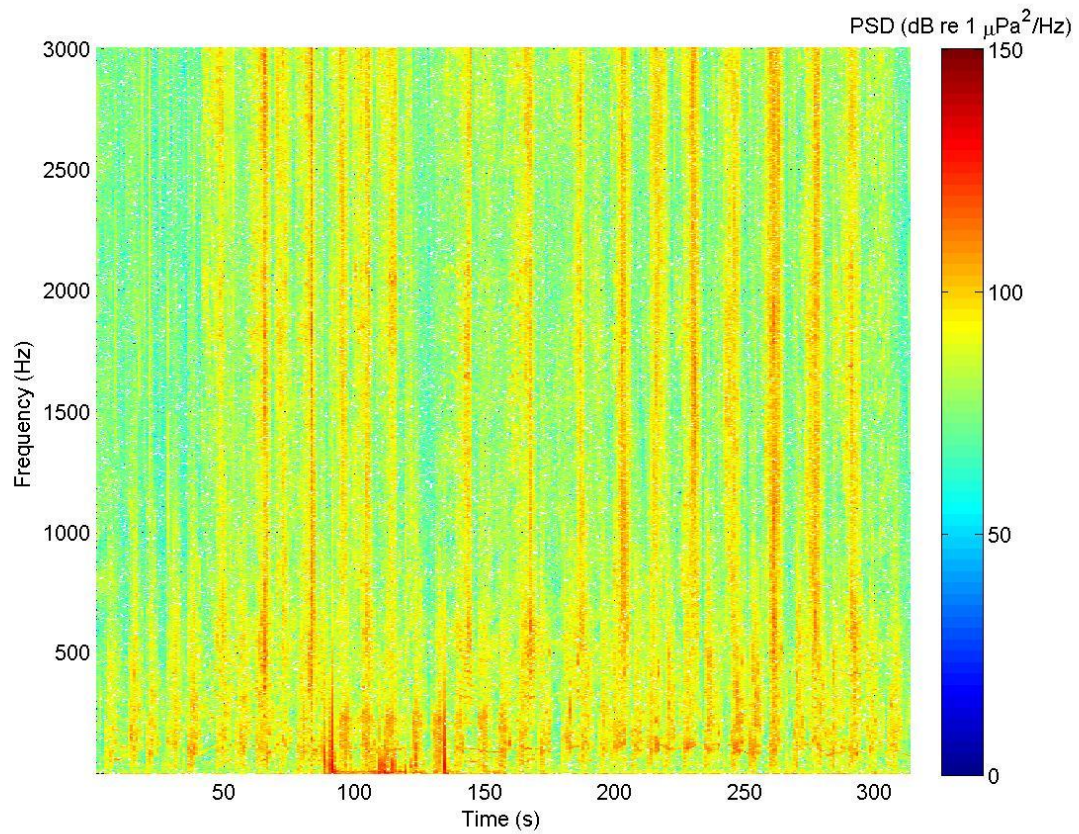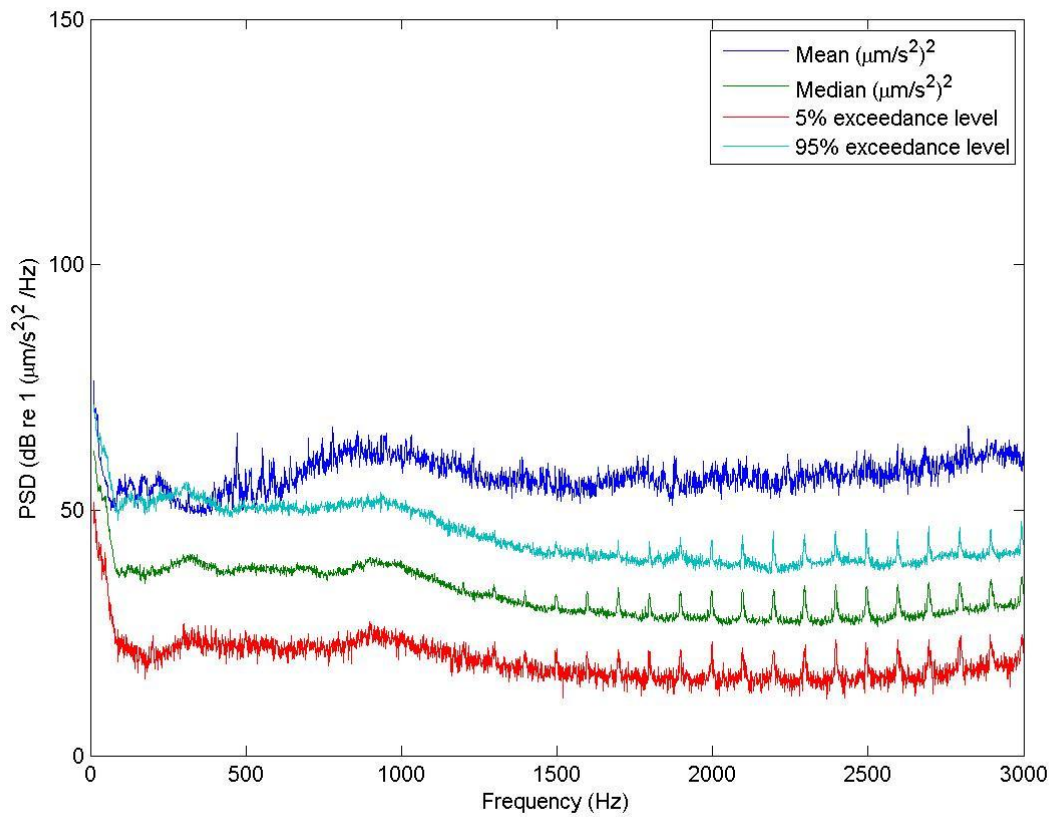
Figure S5. Power spectral density of monoaxial (x-axis – horizontal) particle acceleration recorded 50 cm

from a juvenile bluestreak cleaner wrasse at 4m depth on a coral wall with a SCUBA diver present 1–2 m

away. Mean, median and exceedance levels are calculated from 290 x 1 s samples using a FFT length equal

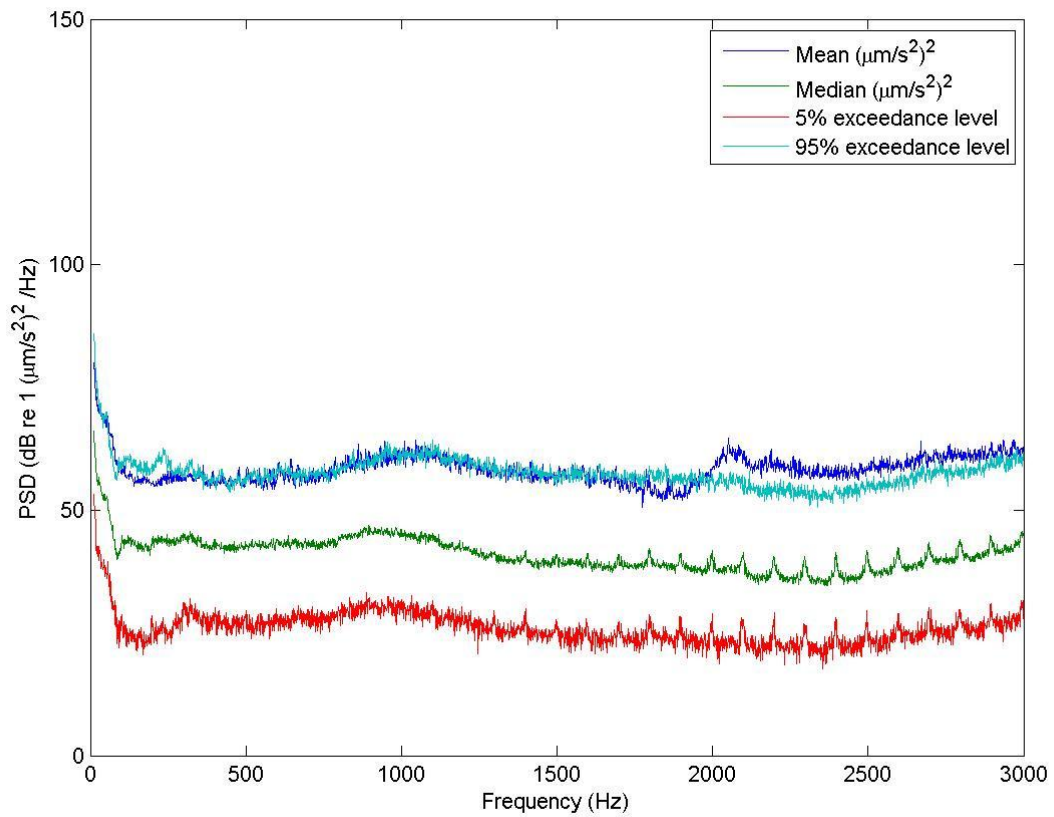to the sampling rate of the recording (44100).

Figure S6. Power spectral density of monoaxial (x-axis – horizontal) particle acceleration recorded 50 cm from a juvenile bluestreak cleaner wrasse at 4m depth on a coral wall with a SCUBA diver present 1–2 m away while an outboard motor boat with a 40 hp engine was driven past multiple times at 10–50 m. Mean, median and exceedance levels are calculated from 300 x 1 s samples using a FFT length equal to the sampling rate of the recording (44100).
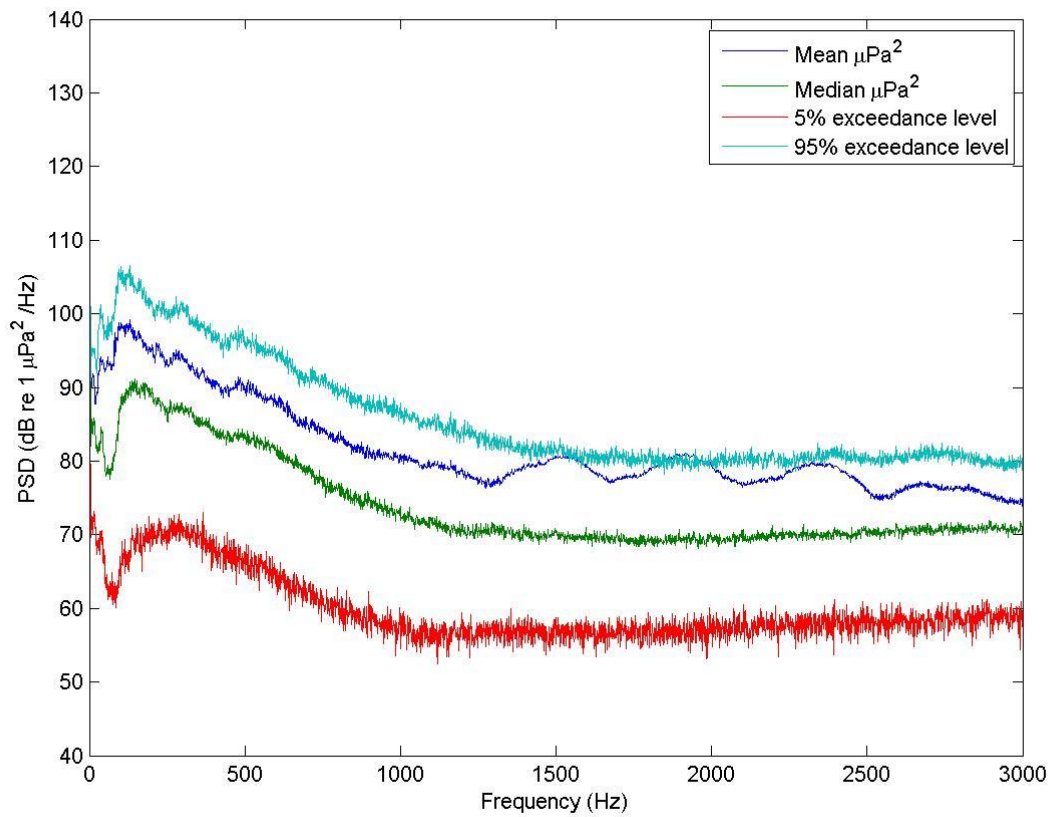
Figure S7. Power spectral density of sound pressure recorded 50 cm from a juvenile bluestreak cleaner wrasse at 4m depth on a coral wall with a SCUBA diver present 1–2 m away. Mean, median and exceedance levels are calculated from 290 x 1 s samples using a FFT length equal to the sampling rate of the recording (44100).
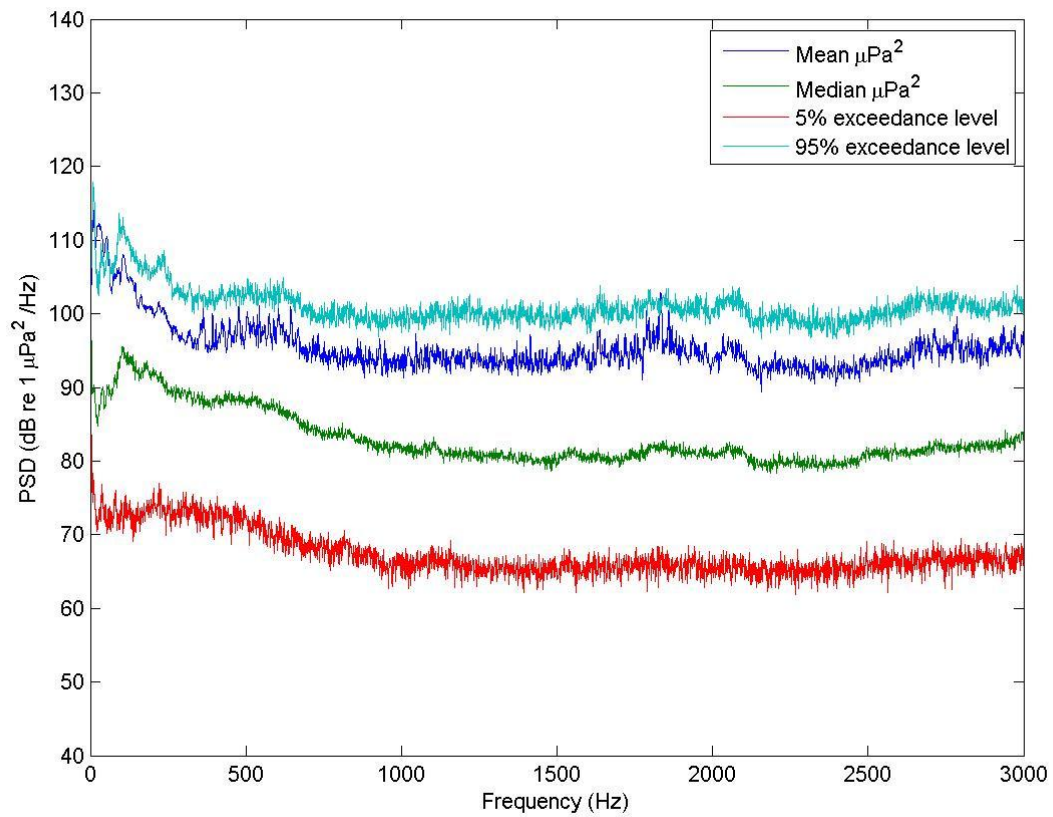
Figure S8. Power spectral density of sound pressure recorded 50 cm from a juvenile bluestreak cleaner wrasse at 4m depth on a coral wall with a SCUBA diver present 1–2 m away while an outboard motor boat with a 40 hp engine was driven past multiple times at 10–50 m. Mean, median and exceedance levels are calculated from 300 x 1 s samples using a FFT length equal to the sampling rate of the recording (44100).