ESM 1: Calculation of acoustic metrics

a- Sound Pressure Level (SPL). Sound level was calculated as the Root Mean Square of Sound Pressure Level [rms(SPL)] using a software developed by NORTEKMED S.A.S. (Toulon, France). The software first calculated Sound Exposure Level (SEL) values with a Fast Fourier Transformation (FFT) size of 131,072 points and a Hamming window, matching a 0.762 Hz resolution. SPL values, in dB_{rms} re 1μPa, were then calculated with formulas integrating SEL values on each frequency band.

b- Bioacoustic Index (BI) was calculated using the function "bioacoustic_index" from the package "soundecology" [65] of R software. It represents the area under the curve of the dB mean spectrum between two frequency limits [66]. Area value is a function of both the sound level and the number of frequency bands used in the sample [67].

c- Spectral entropy (sh) was calculated using the function "sh" from the package "seewave" [68] of R software. As it represents the Shannon evenness of the frequency spectrum [66], sh provides a measurement of the diversity of frequency peaks in the sample.

d- Temporal entropy (th) was calculated using the function "th" from the package "seewave" [68] of R software. As it represents the Shannon evenness of the amplitude envelop [66], th provides a measurement of the temporal stability in the sample.

e- Acoustic entropy index (H) was calculated using the function "H" from the package "seewave" [68] of R software. Comprising both temporal and spectral entropy, it attempts to measure the average diversity within an acoustic community and should increase with the number of vocalizing species and evenness of the acoustic environment [69].

f- Acoustic Complexity Index (ACI) was calculated using the function "ACI" from the package "seewave" [68] of R software. The ACI measures the variation in sound intensity within a recording over changing frequencies [70]. Originally developed by these authors for analysing avian communities, the ACI was later successfully applied to marine habitats (e.g. [14,33,71]).

For H, sh and th calculations on narrow bandwidths (0.1-0.5 kHz; 0.5-1 kHz; 1-2 kHz; 2-7 kHz), we first used the functions "fir" from seewave package and "normalize" from tuneR to filter sound samples [72]. The sampling rate of the recording device (fs) and the number of points used in calculating the Fast Fourier Transform (NFFT) define the frequency resolution of the analysis ($\Delta f = fs/NFFT$). With our recording device having a sampling rate of 100,000 Hz, we chose to use 8,192 points in the calculation of FFT for ACI, H, BI and sh, to match a frequency resolution of 12.2 Hz, close to the optimal frequencies of 15.6 Hz and 23.4 Hz highlighted by Bolgan *et al.* [73] and Bohnenstiehl *et al.* [74] respectively.