

Supplementary material

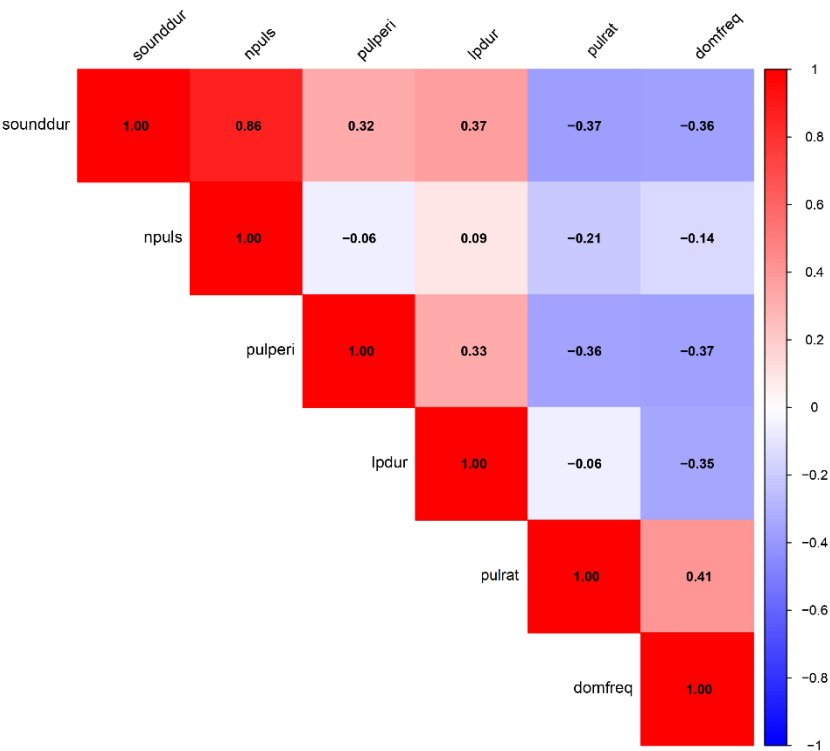


Figure S1. Pearson correlation matrix showing pairwise correlations among the acoustic parameters used in the principal component analysis. The parameters include sound duration (*sounddur*), number of pulses (*npuls*), pulse period (*pulperi*), last pulse duration (*lpdur*), pulse rate (*pulrat*), and dominant frequency (*domfreq*). The color gradient represents the strength and direction of the correlation, with red indicating positive correlations and blue indicating negative correlations. Numerical values correspond to Pearson correlation coefficients.

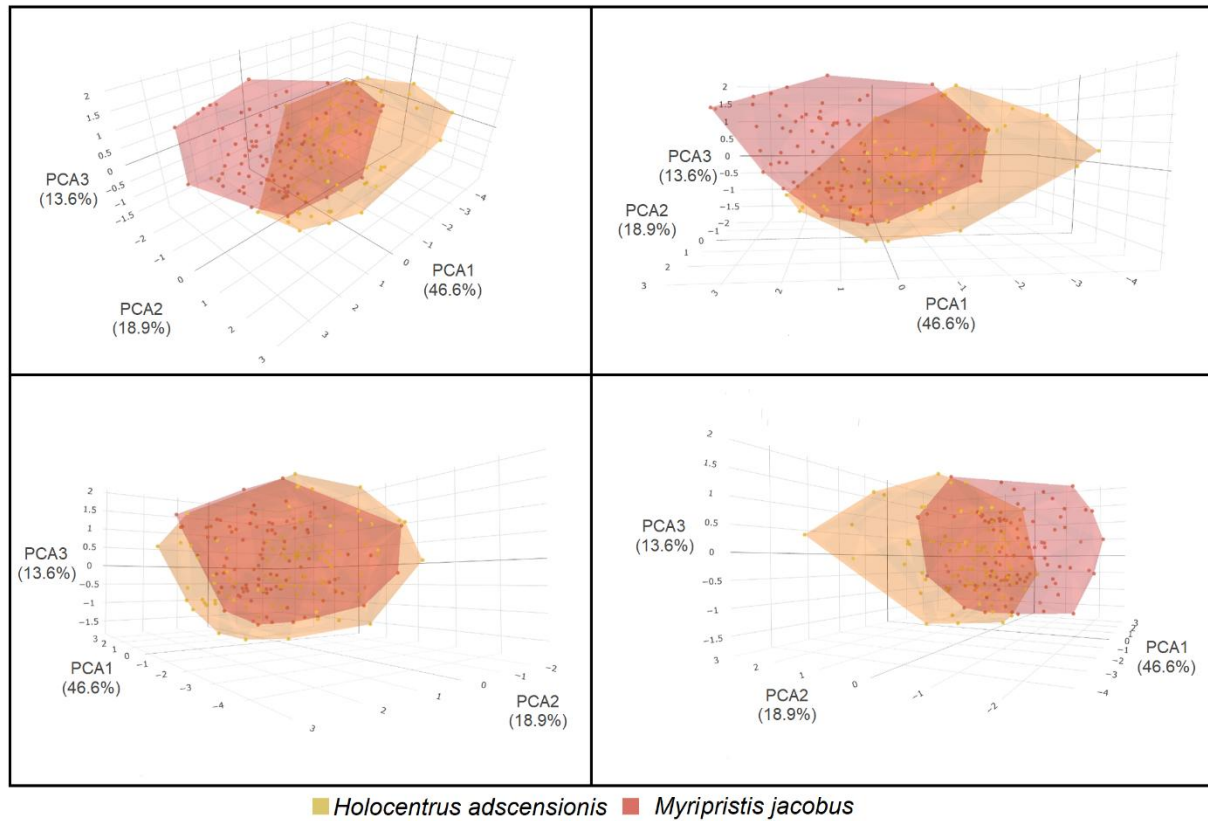


Figure S2. Three-dimensional principal component analysis showing the distribution of sounds recorded from *Holocentrus adscensionis* (N = 100 - yellow circles) and *Myripristis jacobus* (N = 100 - red circles). Analysis was performed on five standardized sound parameters: sound duration, pulse period, last pulse duration, pulse rate, and dominant frequency. The first three principal components are shown, accounting for 46.6%, 18.9%, and 13.6% of the total variance, respectively.

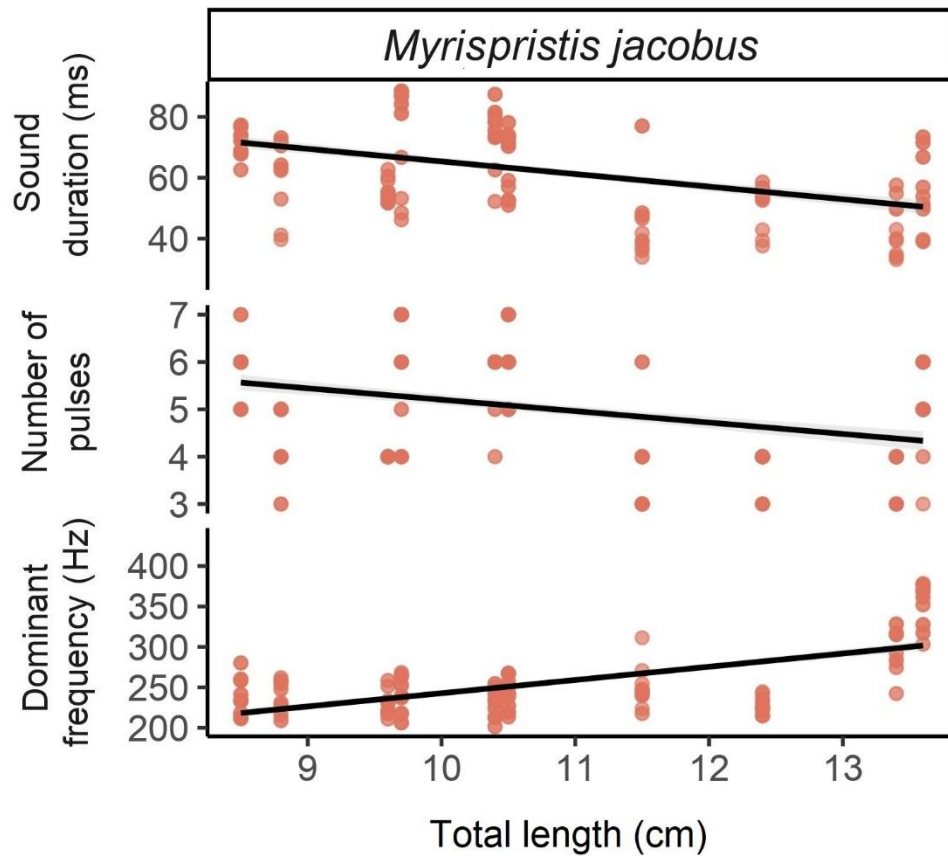


Figure S3. Correlation between total length (cm) and sound parameters of *Myrispristis jacobus*. Each point represents an individual sound parameter. The three panels show (from top to bottom) sound duration (ms), number of pulses, and dominant frequency (Hz). Black lines indicate the linear regression trend for each sound parameter, and the gray shaded area represents the 95% confidence interval around the regression line.

WAV file - *Holocentrus adscensionis* (10 consecutive calls)

WAV file - *Myripristis jacobus* (10 consecutive calls)