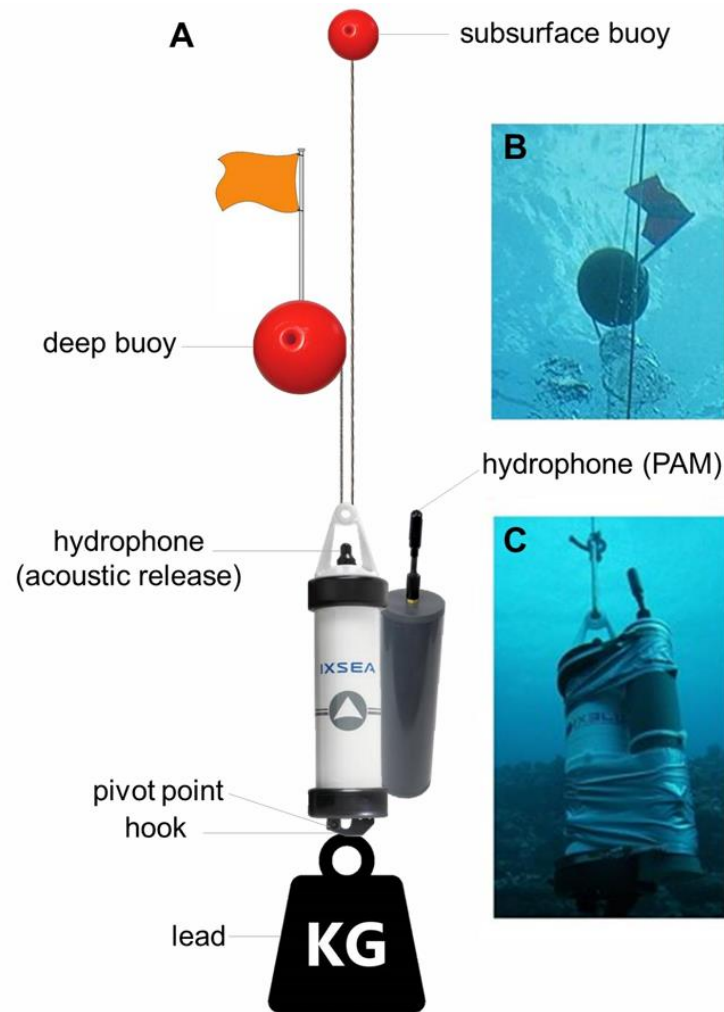# Supplementary material

Figure SP1 Schematization of the acoustic release and the acoustic recorder used to record the biophony at 300 m. (B) Zoom on the deep buoy. (C) Zoom on the acoustic release and the acoustic recorder. The picture was taken at shallower depth for illustration purposes.

Table SP1 Summary of the GAMs models. Edf = effective degree of freedom. NB = negative binomial. The normalized root mean square error (NRMSE) for the AS4 model was calculated to be 15.63%.

Sound type	Occurrence	Model	Residual dispersion	P-value	R^2	edf
AS4	6982	NB	0.78	0.0001	0.52	8.61
FPT6	160	Poisson	1.15	0.0001	0.07	8.86
DS2	118	Poisson	0.62	0.0001	0.19	7.15
AS7-like	91	Poisson	0.72	0.0001	0.21	8.89

$Abundance_{AS4} \sim s(Hour) + Day$, with $Abundance \sim NB$, log link

$Abundance_{FPT6} \sim s(Hour) + Day$, with $Abundance \sim Poisson$, log link

$Abundance_{DS2} \sim s(Hour) + Day$, with $Abundance \sim Poisson$, log link

$Abundance_{AS7\text{-}like} \sim s(Hour) + Day$, with $Abundance \sim Poisson$, log link

Table SP2 Summary of the results of analyses of the acoustic characteristics of the different sound types. Df = degrees of freedom. MWW = Mann–Whitney–Wilcoxon. PC = principal component.

Sound type	Feature	Test	Test value	P-value
AS4	Duration	MWW	20	0.03
	Frequency	Student's t-test	1.05	0.31
	Number of pulses	Welch's t-test	−1.80	0.10
	Pulse period	MWW	13	0.01
	PC1	MWW	24	0.05
DS2	Duration	MWW	88	0.00
	Frequency	Student's t-test	−0.34	0.74
	Number of pulses	Student's t-test	1.39	0.18
	Pulse period	MWW	59.5	0.50
FPT6	Duration	Student's t-test	0.57	0.58
	Frequency	Student's t-test	−1.37	0.19
	Number of pulses	MWW	48	0.91
	Pulse period	Student's t-test	−0.36	0.72
AS7-like	Duration	MWW	89	0.00
	Frequency	MWW	90	0.003
	Number of pulses	MWW	24	0.05
	Pulse period	Student's t-test	4.44	< 0.0001
	PC1	MWW	0	< 0.0001

Table SP3 Location of sampling sites related to this study

Island	Depth (m)	Month	Year	Recording schedule	Relevance
Moorea	20, 60, and 120	09	2018	1 min each 10 min	Sunset period comparison at Moorea Island
Moorea	300	07	2021	Continuous	Main data
Rangiroa	20, 60, and 120	10-11	2018	1 min each 10 min	Additional general comparison along 24 h diel cycle
Raroia		03			
Tikehau		10			