

Table 3. Description of the 17 acoustic variables used in this work. Two variables (frn and frp) are computed from other variables and were not included in PCA or other statistical analyses.

Acoustic Variables	Description
Number of notes (nbn):	number of notes
Call duration (cd):	duration of call in seconds (from the middle of the first note to the middle of the last note).
Note repetition rate (nrr):	$(nbn - 1) / (cd)$.
Peak note (pn):	number of notes within a call to reach the highest energy peak.
Peak time (pt):	time (in seconds) from the beginning of the first note of the call to the maximum energy peak in the call.
Number of pulses per note (nbp):	number of pulses per note (at least 2 notes per call) measured from notes in the middle of the call.
Note duration (nd):	duration (in seconds) of each note for which the number of pulses has been measured. It is measured from the start of the first pulse to the start of the last pulse of the note.
Pulse repetition rate (prp):	It is calculated by $(nbp - 1)/(nd)$
Number of oscillations per pulse (op):	The average of the number of oscillations per pulse by selecting 1 pulse per note, in 2 different notes, for each phrase. Exclude the first and last pulses and count any peak crossing above the line between 2 maximum oscillations.
Pulse duration (pd):	average duration of one pulse (in seconds)
Note dynamics (ndy):	The average of the number of pulses after the most powerful within a note, taking 2 notes, on each of the selected phrases.
Last pulse (lp):	Check if the last pulse in a note is separated from the rest of the note. This variable should be categorized as yes or no. In cases where it is not clear (varies according to the call) choose "yes" if at least part of the recording presents this characteristic.
Full amortization (fa):	Check if, in some part of the note, there are no oscillations, being flat the oscillogram. This variable should be categorized as yes or no. Choose "yes" if at least part of the note presents this characteristic, repeatedly in the recording.
80% of the peak note (p80):	Count how many notes are necessary to reach 80% of the height of the highest peak note.
Initial frequency (ifr):	Measure the initial frequency with maximum energy of a call, looking at the spectrogram

Maximum frequency (mfr):	Measure the point with the highest frequency in a call, looking at the spectrogram.
End frequency (efr):	Measure the frequency at the end of a call, looking at the spectrogram.