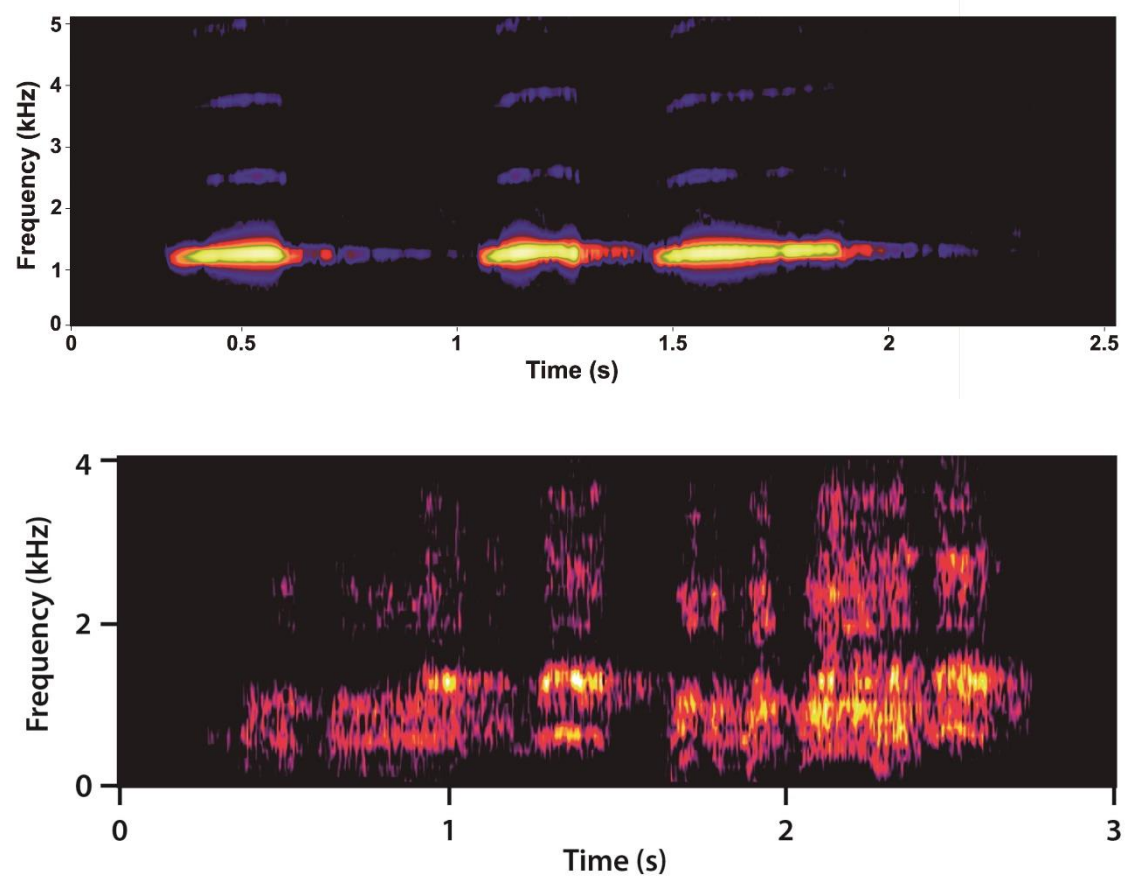


Supplementary Figure S1: Spectrogram of a typical Undulated Tinamou (top) and Chaco Chachalaca (bottom) call in the Brazilian Pantanal.



Supplementary Figure S2: Locations of the four acoustic monitoring stations (yellow pins) and of the meteorological station (red square) in Pantanal Matogrossense (Poconé municipality, Mato Grosso, Brazil). The inset shows location of the study area (star) in Brazil. The Cuiabá River is shown in the lower right corner of the image. The image was extracted from Google Earth, 31 March 2016. Scale bar: 2 km.



Supplementary Table S1: Mean (and range) acoustical parameters of the Undulated Tinamou and Chaco Chachalaca call in the Brazilian Pantanal. Acoustical parameters were obtained after measuring 52 Undulated Tinamou calls and 47 Chaco Chachalaca calls. Recordings were collected using a Song Meter SM2 recorder (Wildlife Acoustics), and call measurements were made using Raven Pro 1.5. Intersyllable gap refers to the time lapse between the first and the second syllable.

Species	Minimum Frequency (Hz)	Maximum Frequency (Hz)	Dominant Frequency (Hz)	Duration (s)	Intersyllable gap (s)
Undulated	1042.0	1476.0	1279.5	1.70	0.27
Tinamou	(944.8 – 1090.2)	(1421.3 – 1548.9)	(1218.8 – 1312.5)	(1.49 – 2.00)	(0.14 – 0.42)
Chaco Chachalaca	288.7 (113.1 – 557.1)	1856.2 (1584.4 – 2804.5)	1238.6 (468.8 – 2239.5)	3.84 ± 2.42 (0.57 – 8.50)	Not measured

Supplementary Table S2: Loading factors of the PCA performed with the three air temperature variables.

	Axis I
Maximum air temperature	0.513
Minimum air temperature	0.780
Mean air temperature	0.995
Variance explained	62.1%