

Supplementary Information

Table S1: List and metadata of recordings collected in the field and in public archives. *Pmm*: *P. m. mocinno*, *Pmc*: *P. m. costaricensis*, *Pan*: *P. antisianus*, *Pau*: *P. auriceps*, *Pf*: *P. fulgidus*, *Pp*: *P. pavoninus*. BISAM: Biblioteca de Sonidos de Aves de México, UCR: Latoratorio de Bioacústica de la Universidad de Costa Rica.

Recording	Location	Country	Latitude	Longitude	Author	Species	Library
33730_44k	Serrania Bellavista	Bolivia	N -15°39'	W -67°3'	T. Parker	<i>Pan</i>	Macaulay
13230_44k	San Martin	Peru	N -5°43.8'	W -77°31.2'	T. Parker	<i>Pan</i>	Macaulay
17779_44k	Huanuco	Peru	N -9°10.2'	W -75°28.8'	V. Emanuel	<i>Pan</i>	Macaulay
17869_44k	Huanuco	Peru	N -9°10.2'	W -75°28.8'	V. Emanuel	<i>Pan</i>	Macaulay
31879_44k	Huanuco	Peru	N -9° 10.19'	W -75° 28' 48"	T. Parker	<i>Pan</i>	Macaulay
17615_44k	Bosque Aputinaye	Peru	N -9° 10.19'	W -75° 28' 48"	T. Parker	<i>Pan</i>	Macaulay
13211_44k	San Martin	Peru	N -5° 43.8'	W -77° 31.19'	T. Parker	<i>Pan</i>	Macaulay
168735_44k	Los Cedros	Ecuador	N 0°19.318092'	W -78°47.22'	S. Olmstead	<i>Pau</i>	Macaulay
74696_44k	South West of Cosanga, Juan	Ecuador	N 0°40.999998'	W -77°55'	M. Robbins	<i>Pau</i>	Macaulay
139093_44k	Mindo	Ecuador	N 0° 1.77'	W -78° 44.59098'	M. Linda	<i>Pau</i>	Macaulay
147204_44k	Napo	Peru	N -11°28.32'	W -74°47.46'	M. Robbins	<i>Pau</i>	Macaulay
174014_44k	Cuzco	Peru	N -13°22.56'	W -73°8.22'	M. Robbins	<i>Pau</i>	Macaulay
147200_44k	Calabazas	Peru	N -11° 28.31'	W -74° 47.45999'	M. Robbins	<i>Pau</i>	Macaulay
XC102638	El Dorado	Colombia	N 11° 6.4679'	W -74° 2.92199'	F. Schmitt	<i>Pf</i>	Xeno-Canto
2007_02_03_A_503-514	Sierra Nevada de Santa Marta	Colombia	N 11°06'	W 74°04'W	N. Krabbe	<i>Pf</i>	Personal
2007_02_13_B_187-189	Sierra Nevada de Santa Marta	Colombia	N 11°06'	W 74°04'	N. Krabbe	<i>Pf</i>	Personal
XC227645_b17a	Rancho Grande	Venezuela	N 10° 20.3999'	W -67° 42'	P. Boesman	<i>Pf</i>	Xeno-Canto
32269_44k	Monteverde	Costa Rica	N 10°18.83382'	W -84°47.68746'	T. Parker	<i>Pmc</i>	Macaulay
39195_44k	Monteverde	Costa Rica	N 10°17.13708'	W -84°47.77014'	T. Parker	<i>Pmc</i>	Macaulay
39209_44k	Monteverde	Costa Rica	N 10°21.9003'	W -84°47.682'	T. Parker	<i>Pmc</i>	Macaulay
53907_44k	Monteverde	Costa Rica	N 10°15.99402'	W -84°49.26228'	D. Ross	<i>Pmc</i>	Macaulay
72803_44k	Monteverde	Costa Rica	N 10°15.99402'	W -84°49.26228'	D. Ross	<i>Pmc</i>	Macaulay
72825_44k	Monteverde	Costa Rica	N 10°15.99402'	W -84°49.26228'	D. Ross	<i>Pmc</i>	Macaulay
76717_44k	Monteverde	Costa Rica	N 10°15.99402'	W -84°49.26228'	C. Marantz	<i>Pmc</i>	Macaulay

BLB20205	Villa Mills	Costa Rica	N 9°34.002'	W -83°40.998'	L. Baptista	<i>Pmc</i>	Macaulay
BLB20206	Villa Mills	Costa Rica	N 9°34.002'	W -83°40.998'	L. Sandra & L. Gaunt	<i>Pmc</i>	Macaulay
LBUCR000060	Carretera Interameric. Km 60	Costa Rica	N 9°32.4'	W -83°54'	J. Sánchez	<i>Pmc</i>	UCR
XC137766	Monteverde	Costa Rica	N 10°18.3'	W -84°47.4'	P. Driver	<i>Pmc</i>	Xeno-Canto
XC274217	Cerro de la Muerte	Costa Rica	N 9°32.4'	W -83°54'	P. Boesman	<i>Pmc</i>	Xeno-Canto
6192_44k	Cerra Punta	Panama	N 8°50.172'	W -82°32.592'	E. Morton	<i>Pmc</i>	Xeno-Canto
XC271505	Cerro Punta	Panama	N 8°50.93208'	W -82°32.50758'	P. Boesman	<i>Pmc</i>	Xeno-Canto
XC271506	Cerro Punta	Panama	N 8°50.93208'	W -82°32.50758'	P. Boesman	<i>Pmc</i>	Xeno-Canto
0919.wav	Sierra de las Minas	Guatemala	N 15°9.33228'	W -89°38.56476'	A. Martínez	<i>Pmm</i>	Personal
137688_44k.wav	Los Tarrales	Guatemala	N 14°33.6'	W -91°10.08'	M. Medler	<i>Pmm</i>	Macaulay
137692_44k.wav	Los Tarrales	Guatemala	N 14°33.6'	W -91°10.08'	M. Medler	<i>Pmm</i>	Macaulay
160211-010.wav	Los Andes	Guatemala	N 14°32.9268'	W -91°11.00226'	P. Bolaños-Sittler	<i>Pmm</i>	Personal
170326_0567	Refugio del Quetzal, San Marcos	Guatemala	N 14°56.571'	W -91°52.28202'	P. Bolaños-Sittler	<i>Pmm</i>	Personal
172695_44k	Los Tarrales	Guatemala	N 14°33.348'	W -91°9.9876'	J. de León	<i>Pmm</i>	Macaulay
6193_44k.wav	E of Lake and Volcano Atitlan	Guatemala	N 14°35.07348'	W -90°10.74522'	A. LaBastille	<i>Pmm</i>	Macaulay
130609-12	Ranchitos del Quetzal	Guatemala	N 15°12.92934'	W -90°13.15494'	P. Bolaños-Sittler	<i>Pmm</i>	Personal
170120_0555	Refugio del Quetzal, San Marcos	Guatemala	N 14°56.43798'	W -91°52.35198'	P. Bolaños-Sittler	<i>Pmm</i>	Personal
160211-013	Los Andes	Guatemala	N 14°32.77602'	W -91°11.118'	P. Bolaños-Sittler	<i>Pmm</i>	Personal
160211-011	Los Andes	Guatemala	N 14°32.77602'	W -91°11.118'	P. Bolaños-Sittler	<i>Pmm</i>	Personal
170907-003	Ranchitos del Quetzal	Guatemala	N 15°12.92934'	W -90°13.15494'	P. Bolaños-Sittler	<i>Pmm</i>	Personal
XC108437	Cusuco	Honduras	N 15°33.12'	W -88°17.76'	S. Jones	<i>Pmm</i>	Xeno-Canto
120315_08.wav	El Triunfo, Chiapas	Mexico	N 15°40.00554'	W -92°48.0021'	F. González-García	<i>Pmm</i>	BISAM
120418_02.wav	El Triunfo, Chiapas	Mexico	N 15°40.00554'	W -92°48.0021'	F. González-García	<i>Pmm</i>	BISAM
127213_44k.wav	El Triunfo Reserve, Chiapas	Mexico	N 15°39.53333'	W -92°48.7'	C. Marantz	<i>Pmm</i>	Macaulay
130417_00.wav	El Triunfo, Chiapas	Mexico	N 15°40.00554'	W -92°48.0021'	F. González-García	<i>Pmm</i>	BISAM
140220_15.wav	El Triunfo, Chiapas	Mexico	N 15°40.00554'	W -92°48.0021'	F. González-García	<i>Pmm</i>	BISAM
140221_0051.wav	El Triunfo, Chiapas	Mexico	N 15°40.00554'	W -92°48.0021'	F. González-García	<i>Pmm</i>	BISAM
140221_0054.wav	El Triunfo, Chiapas	Mexico	N 15°40.00554'	W -92°48.0021'	F. González-García	<i>Pmm</i>	BISAM
140221_0055.wav	El Triunfo, Chiapas	Mexico	N 15°40.00554'	W -92°48.0021'	F. González-García	<i>Pmm</i>	BISAM
140318_76.wav	El Triunfo, Chiapas	Mexico	N 15°40.00554'	W -92°48.0021'	F. González-García	<i>Pmm</i>	BISAM

140319_0034.wav	El Triunfo, Chiapas	Mexico	N 15°40.00554'	W -92°48.0021'	F. González-García	<i>Pmm</i>	BISAM
140320_0077.wav	El Triunfo, Chiapas	Mexico	N 15°40.00554'	W -92°48.0021'	F. González-García	<i>Pmm</i>	BISAM
6189_44k.wav	Comitan, Chiapas	Mexico	N 16°57.702'	W -91°57.5611'	A. May	<i>Pmm</i>	Macaulay
86687_44k.wav	El Triunfo, Chiapas	Mexico	N 15°39'	W -92°49.002'	C. Duncan	<i>Pmm</i>	Macaulay
86650_44k	N of Emiliano Zapata, Chiapas	México	N 17°10'	W -92°25'	C. Duncan	<i>Pmm</i>	Macaulay
95076_44k	El Triunfo, Chiapas	México	N 15°39'	W -92°49'	C. Hanks & B. O'Shea	<i>Pmm</i>	Macaulay
64749.wav	West of Ariquemes, Rodonia	Brazil	N 9°-53.916'	W -63°16.084'	K. Zimmer	<i>Pp</i>	Macaulay
37386_44k	North of Rio Maniti, Loreto	Peru	N -3°27'	W -72°51'	M. Robbins	<i>Pp</i>	Macaulay
37506_44k	Rio Maniti, Loreto	Peru	N -3°27'	W -72°51'	M. Robbins	<i>Pp</i>	Macaulay
76091_44k	Madre de Dios	Peru	N -12°49.002'	W -69°24'	C. Marantz	<i>Pp</i>	Macaulay
