

SUPPORTING INFORMATION

Effect of Site Attributes and Matrix Composition on Neotropical Primate Species Richness and Functional Traits: a Comparison Among Regions

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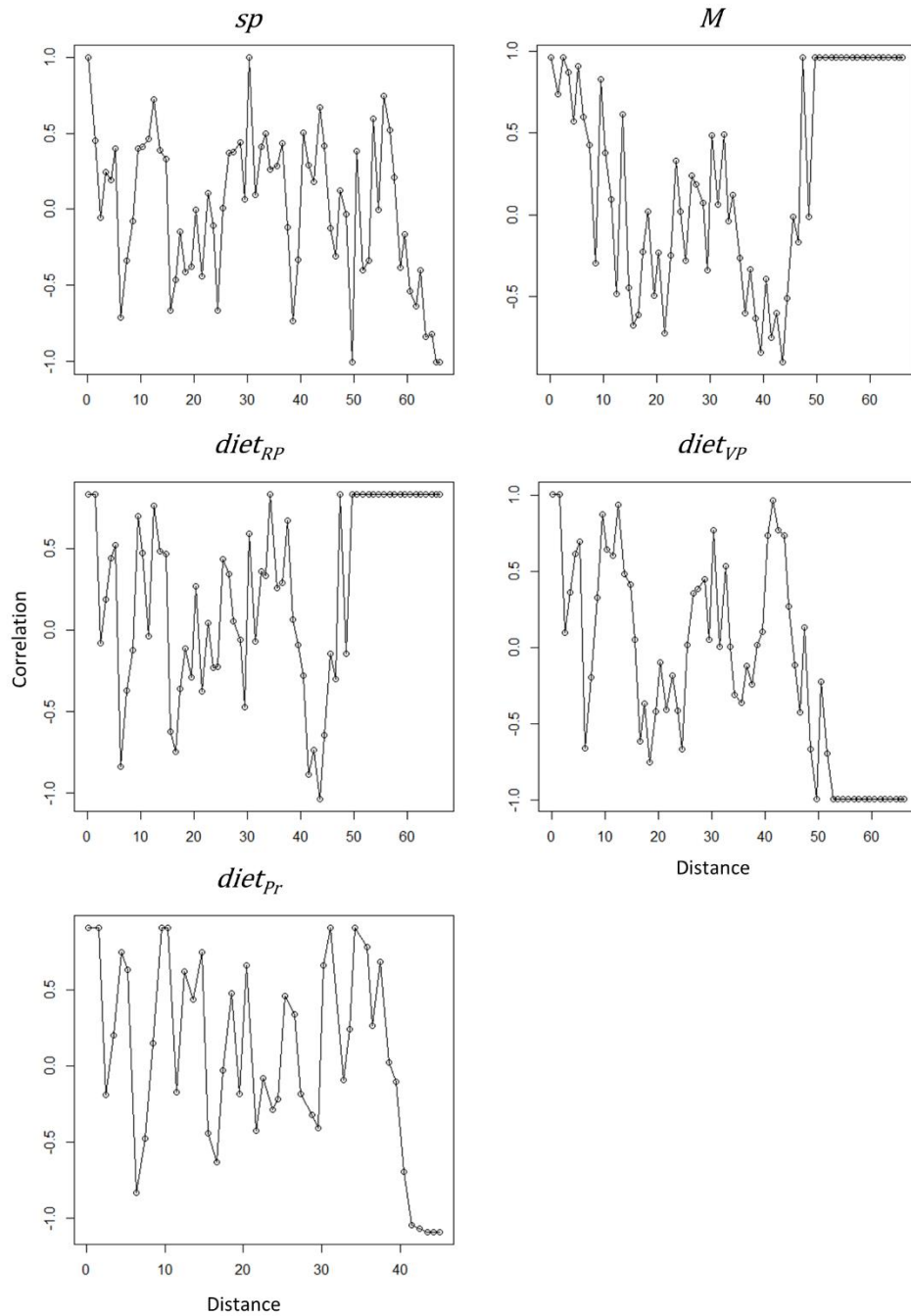


Figure S1. Moran's I correlograms of the residuals of each model. Species retention (*sp*), mass retention (*M*), species retention with diet composed of reproductive parts of the plant (*diet_{RP}*), species retention with diet composed of vegetative parts of the plant (*diet_{VP}*), species retention with diet composed of prey (*diet_{PR}*).

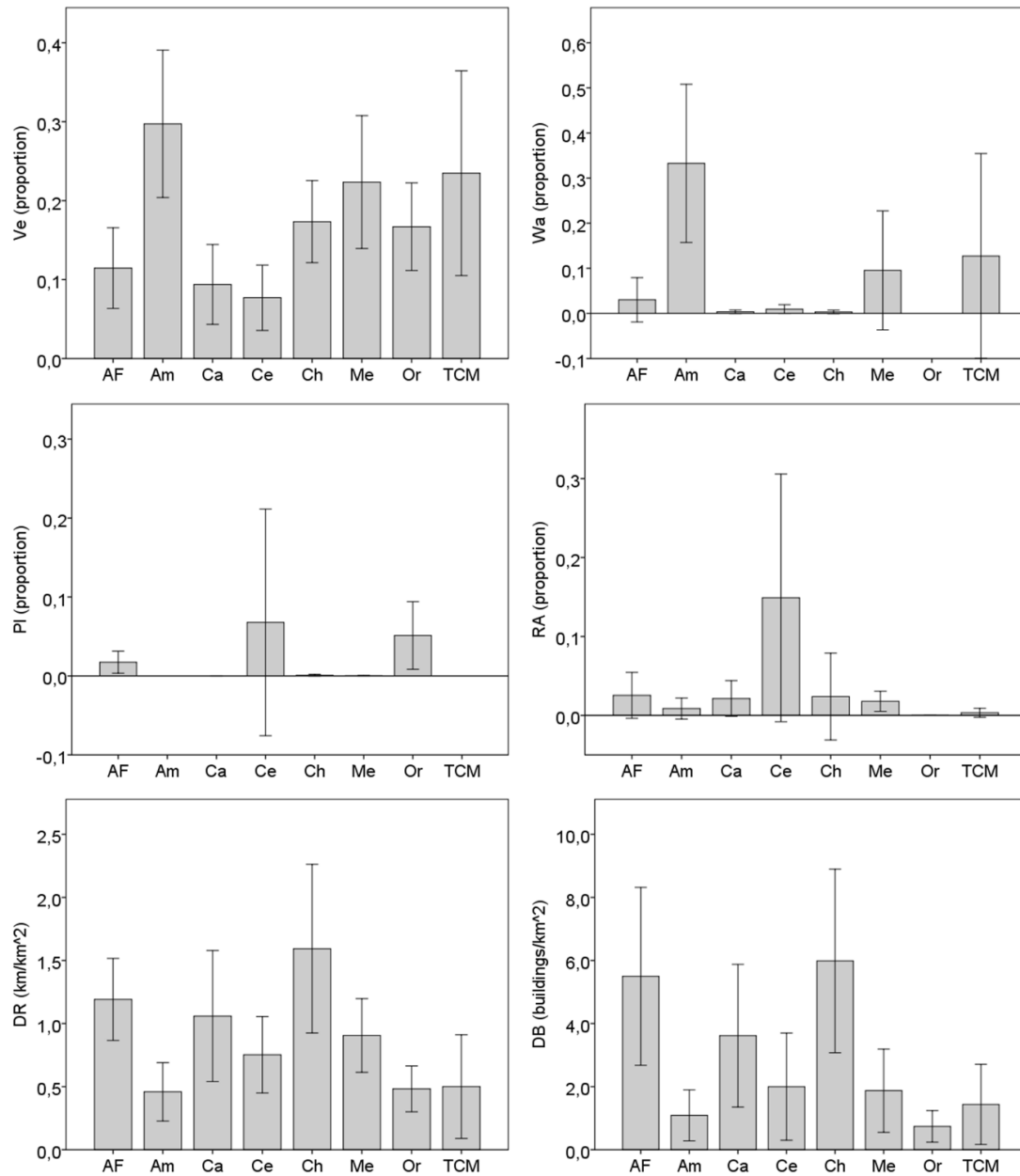


Figure S2. Proportion of matrix components among eight sub-regions in the Neotropics. Landscape attributes: forest vegetation (Ve), plantations (Pl), water bodies (Wa), residential areas (RA), density of buildings (DB) and density of roads (DR). Sub-regions: Atlantic Forest (AF), Amazonia (Am), Caribbean (Ca), Cerrado (Ce), Chaco (Ch), Mesoamerica (Me), Orinoco (Or), Tumbes-Chocó-Magdalena (TCM).

Table S1. List of 97 fragments (Fr) and species used in the analysis. Sub-regions are Amazonia (Am), Caribbean (Ca), Cerrado (Ce), Atlantic Forest (AF), Mesoamerica (Me), Orinoco (Or), Chaco (Ch) and Tumbes-Chocó-Magdalena (TCM). PA indicate if the fragment is within a protected area. Methods used in each work were based on direct observation (do), such as transect lines, behavior studies and walks; auditory records (ar), such as playbacks and interviews (in). The number 1 and 0 in each species indicate the presence or absence, respectively. Countries are Colombia (Co), Mexico (Mx), Costa Rica (CR), Peru (Pe), Brazil (Br), Belize (Be), Panama (Pa) and Bolivia (Bo). NI is no information.

Fr	Sub-region	Country	PA	Year image	Year field	Method	Species 1	Species 2	Species 3	Species 4	Species 5	Species 6	Species 7	Species 8	Species 9
1	AF	Br	yes	2008	2007	do	<i>Callithrix penicillata</i> 0	<i>Alouatta guariba</i> 1	<i>Cebus nigratus</i> 0	<i>Callicebus nigrifrons</i> 0					
2	AF	Br	yes	2008	2007	do	<i>Callithrix penicillata</i> 1	<i>Alouatta guariba</i> 1	<i>Cebus nigratus</i> 0	<i>Callicebus nigrifrons</i> 1					
3	AF	Br	yes	2013	2013	do	<i>Callicebus</i> sp 1	<i>Callithrix penicillata</i> 1	<i>Alouatta guariba</i> 0	<i>Sapajus nigratus</i> 0					
4	AF	Br	no	2011	2008	do	<i>Cebus nigratus</i> 1	<i>Alouatta caraya</i> 1							
5	AF	Br	no	2012	2011	do	<i>Callithrix penicillata</i> 0	<i>Callicebus nigrifrons</i> 1	<i>Alouatta guariba clamitans</i> 0	<i>Sapajus nigratus</i> 0	<i>Brachyteles hypoxanthus</i> 0				
6	AF	Br	no	2013	2013	do	<i>Sapajus flavius</i> 1	<i>Callithrix jacchus</i> 1	<i>Alouatta belzebul</i> 0						
7	AF	Br	no	2016	2000	do/in/ar	<i>Callithrix</i> sp 1	<i>Callicebus melanochir</i> 1	<i>Cebus</i> sp 1	<i>Alouatta guariba</i> 0	<i>Leontopithecus chrysomelas</i> 0				
8	AF	Br	no	2015	2000	do/in/ar	<i>Callithrix</i> sp 1	<i>Callicebus melanochir</i> 1	<i>Cebus</i> sp 1	<i>Alouatta guariba</i> 0	<i>Leontopithecus chrysomelas</i> 1				
9	AF	Br	no	2010	2010	do/ar	<i>Alouatta guariba clamitans</i> 0	<i>Callithrix aurita</i> 0	<i>Callithrix penicillata</i> 0	<i>Sapajus nigratus</i> 1	<i>Callicebus nigrifrons</i> 1				
10	AF	Br	no	2010	2010	do/ar	<i>Alouatta guariba clamitans</i> 1	<i>Callithrix aurita</i> 1	<i>Callithrix penicillata</i> 0	<i>Sapajus nigratus</i> 0	<i>Callicebus nigrifrons</i> 1	<i>Brachyteles arachnoides</i> 0			
11	AF	Br	no	2013	2010	ar	<i>Callithrix aurita</i> 0	<i>Callicebus nigrifrons</i> 1	<i>Sapajus nigratus</i> 0	<i>Alouatta caraya</i> 0					
12	AF	Br	no	2013	2009	in	<i>Sapajus</i>	<i>Alouatta</i>	<i>Callithrix</i>						

							<i>flavius</i> 1	<i>belzebul</i> 0	<i>jacchus</i> 1						
13	AF	Br	no	2013	2009	in	<i>Sapajus flavius</i> 1	<i>Alouatta belzebul</i> 0	<i>Callithrix jacchus</i> 1						
14	AF	Br	no	2013	2009	in	<i>Sapajus flavius</i> 1	<i>Alouatta belzebul</i> 0	<i>Callithrix jacchus</i> 1						
15	AF	Br	no	2012	2002	do/in	<i>Callithrix</i> sp 1	<i>Callicebus</i> sp 1	<i>Cebus</i> sp 1	<i>Alouatta guariba</i> 1	<i>Leontopithecus chrysomelas</i> 0				
16	Am	Pe	no	2005	2004	do	<i>Saguinus fuscicollis leucogenys</i> 1	<i>Callicebus oenanthe</i> 1	<i>Cebus albifrons</i> 0	<i>Ateles belzebuth</i> 0	<i>Oreonax flavicauda</i> 0	<i>Sapajus macrocephalus</i> 0	<i>Alouatta seniculus</i> 0	<i>Saimiri sciureus</i> 0	
17	Am	Br	no	2017	2001	do	<i>Alouatta belzebul</i> 1	<i>Cebus apella</i> 1	<i>Chiropotes satanas</i> 0	<i>Saimiri sciureus</i> 0	<i>Saguinus midas</i> 0	<i>Cebus kaapori</i> 0			
18	Am	Co	no	2013	2008	do	<i>Lagothrix lagotricha</i> 1	<i>Alouatta seniculus</i> 1	<i>Saimiri sciureus</i> 1	<i>Callicebus torquatus lugens</i> 1	<i>Saguinus inustus</i> 1	<i>Cebus albifrons</i> 1	<i>Sapajus apella</i> 1	<i>Aotus</i> sp 1	
19	Am	Br	no	2017	2002	do	<i>Chiropotes satanas</i> 1	<i>Cebus apella</i> 1	<i>Alouatta belzebul</i> 1	<i>Saimiri sciureus</i> 1	<i>Saguinus niger</i> 0	<i>Callicebus moloch</i> 0			
20	Am	Br	no	2017	2002	do	<i>Chiropotes satanas</i> 1	<i>Cebus apella</i> 1	<i>Alouatta belzebul</i> 1	<i>Aotus infulatus</i> 0	<i>Saimiri sciureus</i> 0	<i>Saguinus midas</i> 0	<i>Cebus kaapori</i> 0		
21	Am	Br	no	2002	2000	do	<i>Alouatta macconnelli</i> 1	<i>Saguinus midas</i> 1	<i>Pithecia chrysocephala</i> 1	<i>Chiropotes satanas chiropotes</i> 1	<i>Ateles paniscus</i> 0	<i>Sapajus apella</i> 0	<i>Cebus olivaceus</i> 0		
22	Am	Br	no	2002	2000	do	<i>Alouatta macconnelli</i> 1	<i>Saguinus midas</i> 0	<i>Pithecia chrysocephala</i> 0	<i>Chiropotes satanas chiropotes</i> 0	<i>Ateles paniscus</i> 0	<i>Sapajus apella</i> 0	<i>Cebus olivaceus</i> 0		
23	Am	Br	yes	2007	2008	do	<i>Alouatta macconnelli</i> 1	<i>Cebus apella</i> 1	<i>Ateles paniscus</i> 1	<i>Chiropotes sagulatus</i> 0	<i>Pithecia pithecia</i> 0	<i>Saguinus midas</i> 0	<i>Saimiri sciureus</i> 0	<i>Cebus olivaceus</i> 0	
24	Am	Br	yes	2007	2008	do	<i>Alouatta macconnelli</i> 1	<i>Cebus apella</i> 1	<i>Ateles paniscus</i> 1	<i>Chiropotes sagulatus</i> 1	<i>Pithecia pithecia</i> 0	<i>Saguinus midas</i> 0	<i>Saimiri sciureus</i> 0	<i>Cebus olivaceus</i> 0	
25	Am	Br	yes	2007	2008	do	<i>Alouatta macconnelli</i> 1	<i>Cebus apella</i> 1	<i>Ateles paniscus</i> 1	<i>Chiropotes sagulatus</i> 1	<i>Pithecia pithecia</i> 0	<i>Saguinus midas</i> 1	<i>Saimiri sciureus</i> 0	<i>Cebus olivaceus</i> 0	
26	Am	Br	yes	2007	2008	do	<i>Alouatta macconnelli</i> 1	<i>Cebus apella</i> 1	<i>Ateles paniscus</i> 1	<i>Chiropotes sagulatus</i> 1	<i>Pithecia pithecia</i> 1	<i>Saguinus midas</i> 1	<i>Saimiri sciureus</i> 0	<i>Cebus olivaceus</i> 0	
27	Am	Br	yes	2007	2008	do	<i>Alouatta macconnelli</i> 1	<i>Cebus apella</i> 1	<i>Ateles paniscus</i> 1	<i>Chiropotes sagulatus</i> 1	<i>Pithecia pithecia</i> 1	<i>Saguinus midas</i> 0	<i>Saimiri sciureus</i> 0	<i>Cebus olivaceus</i> 0	
28	Am	Br	yes	2013	2009	do	<i>Sapajus apella</i> 1	<i>Saguinus weddelli</i> 1	<i>Aotus nigriceps</i> 1	<i>Callicebus cf. moloch</i> 1	<i>Pithecia irrorata</i> 1	<i>Alouatta puruensis</i> 1	<i>Ateles chamek</i> 1	<i>Saimiri ustus</i> 1	<i>Chiropotes albinasus</i> 1

29	Am	Br	no	2010	2007	do	<i>Cebus apella</i> 0	<i>Mico argentatus</i> 0	<i>Saguinus niger</i> 0	<i>Saimiri sciureus</i> 0	<i>Aotus azarae</i> 0	<i>Callicebus moloch</i> 0	<i>Chiropotes albinasus</i> 0	<i>Alouatta belzebul</i> 1	<i>Ateles marginatus</i> 0
30	Am	Br	no	2010	2009	do	<i>Cebus kaapori</i> 1	<i>Alouatta belzebul</i> 1	<i>Saimiri sciureus</i> 1	<i>Sapajus apella</i> 1	<i>Chiropotes satanas</i> 0	<i>Saguinus midas</i> 0			
31	Am	Br	no	2015	NI	do	<i>Alouatta belzebul</i> 1	<i>Ateles marginatus</i> 0	<i>Callicebus moloch</i> 0	<i>Cebus apella</i> 1	<i>Chiropotes albinasus</i> 0	<i>Mico argentatus</i> 1	<i>Saimiri sciureus</i> 0		
32	Am	Br	no	2016	NI	do	<i>Alouatta belzebul</i> 1	<i>Ateles marginatus</i> 1	<i>Callicebus moloch</i> 1	<i>Cebus apella</i> 1	<i>Chiropotes albinasus</i> 1	<i>Mico argentatus</i> 1	<i>Saimiri sciureus</i> 1		
33	Am	Br	no	2012	NI	do	<i>Alouatta belzebul</i> 1	<i>Ateles marginatus</i> 1	<i>Callicebus moloch</i> 1	<i>Cebus apella</i> 1	<i>Chiropotes albinasus</i> 1	<i>Mico argentatus</i> 1	<i>Saimiri sciureus</i> 1		
34	Am	Br	no	2012	NI	do	<i>Alouatta belzebul</i> 1	<i>Ateles marginatus</i> 0	<i>Callicebus moloch</i> 1	<i>Cebus apella</i> 1	<i>Chiropotes albinasus</i> 1	<i>Mico argentatus</i> 1	<i>Saimiri sciureus</i> 1		
35	Am	Br	yes	2008	2008	do/in	<i>Ateles chamek</i> 1	<i>Alouatta seniculus</i> 1	<i>Cebus apella</i> 1	<i>Chiropotes albinasus</i> 1	<i>Callicebus sp</i> 1	<i>Pithecia irrorata</i> 1	<i>Saimiri ustus</i> 1	<i>Aotus nigriceps</i> 1	<i>Saguinus fuscicollis weddelli</i> 1
36	Ca	Co	no	2007	2005	do	<i>Alouatta seniculus</i> 1	<i>Saguinus oedipus</i> 1	<i>Cebus capucinus</i> 0						
37	Ca	Co	no	2004	2005	do	<i>Alouatta seniculus</i> 1	<i>Saguinus oedipus</i> 1	<i>Cebus capucinus</i> 1	<i>Alouatta palliata</i> 0					
38	Ca	Co	no	2011	2010	do	<i>Alouatta seniculus seniculus</i> 1	<i>Saguinus oedipus</i> 1	<i>Cebus capucinus capucinus</i> 1	<i>Alouatta palliata</i> 0	<i>Ateles fusciceps</i> 0				
39	Ca	Co	no	2011	2010	do	<i>Alouatta seniculus seniculus</i> 1	<i>Saguinus oedipus</i> 1	<i>Cebus capucinus capucinus</i> 1	<i>Alouatta palliata</i> 0	<i>Ateles fusciceps</i> 0				
40	Ca	Co	no	2012	2010	do	<i>Alouatta seniculus</i> 1	<i>Saguinus oedipus</i> 1	<i>Ateles geoffroyi</i> 0	<i>Cebus capucinus</i> 0	<i>Alouatta palliata</i> 0				
41	Ca	Co	no	2011	2010	do	<i>Alouatta seniculus</i> 1	<i>Saguinus oedipus</i> 0	<i>Ateles geoffroyi</i> 0	<i>Cebus capucinus</i> 0	<i>Alouatta palliata</i> 0				
42	Ca	Co	no	2011	2010	do	<i>Alouatta seniculus</i> 1	<i>Saguinus oedipus</i> 0	<i>Ateles geoffroyi</i> 0	<i>Cebus capucinus</i> 0	<i>Alouatta palliata</i> 0				
43	Ca	Co	no	2011	2010	do	<i>Alouatta seniculus</i> 1	<i>Saguinus oedipus</i> 1	<i>Ateles geoffroyi</i> 0	<i>Cebus capucinus</i> 0	<i>Alouatta palliata</i> 0				
44	Ca	Co	no	2011	2010	do	<i>Alouatta seniculus</i> 1	<i>Saguinus oedipus</i> 0	<i>Ateles geoffroyi</i> 0	<i>Cebus capucinus</i> 0	<i>Alouatta palliata</i> 0				
45	Ca	Co	no	2011	2010	do	<i>Alouatta seniculus</i> 1	<i>Saguinus oedipus</i> 1	<i>Ateles geoffroyi</i> 0	<i>Cebus capucinus</i> 0	<i>Alouatta palliata</i> 0				
46	Ce	Br	yes	2003	1992	do	<i>Callicebus personatus</i> 1	<i>Alouatta caraya</i> 1	<i>Callithrix penicillata</i> 1	<i>Sapajus nigratus</i> 0					
47	Ce	Br	yes	2009	2009	do	<i>Alouatta</i>	<i>Sapajus</i>	<i>Callithrix</i>						

							<i>caraya</i> 1	<i>libidinosus</i> 1	<i>penicillata</i> 0					
48	Ce	Br	no	2002	1998	do	<i>Callithrix penicillata</i> 1	<i>Cebus apella</i> 1	<i>Alouatta caraya</i> 0	<i>Callicebus nigrifrons</i> 0				
49	Ce	Br	yes	2002	2002	do	<i>Callithrix geoffroyi</i> 1	<i>Alouatta caraya</i> 1	<i>Callicebus nigrifrons</i> 0	<i>Callithrix penicillata</i> 0				
50	Ce	Br	no	2015	2015	do	<i>Callithrix penicillata</i> 1	<i>Sapajus libidinosus</i> 0	<i>Alouatta caraya</i> 0	<i>Callicebus nigrifrons</i> 0				
51	Ce	Br	yes	2012	NI	do	<i>Cebus apella nigrinus</i> 1	<i>Callithrix penicillata</i> 1	<i>Alouatta caraya</i> 0	<i>Callicebus nigrifrons</i> 0				
52	Ce	Br	no	2007	2000	do	<i>Callithrix aurita</i> 0	<i>Callicebus personatus</i> 0	<i>Cebus apella</i> 1	<i>Alouatta guariba</i> 1	<i>Brachyteles arachnoides</i> 0			
53	Ce	Br	no	2007	2000	do	<i>Callithrix aurita</i> 1	<i>Callicebus personatus</i> 1	<i>Cebus apella</i> 1	<i>Alouatta guariba</i> 1	<i>Brachyteles arachnoides</i> 1			
54	Ce	Br	no	2007	2000	do	<i>Callithrix aurita</i> 0	<i>Callicebus personatus</i> 1	<i>Cebus apella</i> 1	<i>Alouatta guariba</i> 1	<i>Brachyteles arachnoides</i> 1			
55	Ch	Bo	yes	2006	2005	do	<i>Callithrix melanura</i> 1	<i>Cebus libidinosus juruanus</i> 1	<i>Callicebus donacophilus</i> 1	<i>Aotus azarae boliviensis</i> 0	<i>Alouatta caraya</i> 0	<i>Saimiri boliviensis</i> 0	<i>Alouatta sara</i> 0	<i>Ateles chamek</i> 0
56	Ch	Bo	yes	2006	2005	do	<i>Callithrix melanura</i> 1	<i>Cebus libidinosus juruanus</i> 1	<i>Callicebus donacophilus</i> 1	<i>Aotus azarae boliviensis</i> 0	<i>Alouatta caraya</i> 0	<i>Saimiri boliviensis</i> 0	<i>Alouatta sara</i> 0	<i>Ateles chamek</i> 0
57	Ch	Bo	no	2006	2005	do	<i>Callithrix melanura</i> 1	<i>Cebus libidinosus juruanus</i> 1	<i>Callicebus donacophilus</i> 1	<i>Aotus azarae boliviensis</i> 1	<i>Alouatta caraya</i> 1	<i>Saimiri boliviensis</i> 0	<i>Alouatta sara</i> 0	<i>Ateles chamek</i> 0
58	Ch	Bo	no	2010	2005	do	<i>Callithrix melanura</i> 0	<i>Cebus libidinosus juruanus</i> 0	<i>Callicebus donacophilus</i> 1	<i>Aotus azarae boliviensis</i> 0	<i>Alouatta caraya</i> 0	<i>Saimiri boliviensis</i> 0	<i>Alouatta sara</i> 0	<i>Ateles chamek</i> 0
59	Ch	Bo	no	2010	2005	do	<i>Callithrix melanura</i> 0	<i>Cebus libidinosus juruanus</i> 1	<i>Callicebus donacophilus</i> 1	<i>Aotus azarae boliviensis</i> 1	<i>Alouatta caraya</i> 0	<i>Saimiri boliviensis</i> 0	<i>Alouatta sara</i> 0	<i>Ateles chamek</i> 0
60	Ch	Bo	no	2010	2005	do	<i>Callithrix melanura</i> 0	<i>Cebus libidinosus juruanus</i> 1	<i>Callicebus donacophilus</i> 1	<i>Aotus azarae boliviensis</i>	<i>Alouatta caraya</i> 0	<i>Saimiri boliviensis</i> 0	<i>Alouatta sara</i> 0	<i>Ateles chamek</i> 0

										0				
61	Ch	Bo	no	2012	2005	do	<i>Callithrix melanura</i> 1	<i>Cebus libidinosus juruanus</i> 1	<i>Callicebus donacophilus</i> 0	<i>Aotus azarae boliviensis</i> 0	<i>Alouatta caraya</i> 0	<i>Saimiri boliviensis</i> 0	<i>Alouatta sara</i> 0	<i>Ateles chamek</i> 0
62	Ch	Bo	no	2010	2005	do	<i>Callithrix melanura</i> 1	<i>Cebus libidinosus juruanus</i> 1	<i>Callicebus donacophilus</i> 0	<i>Aotus azarae boliviensis</i> 0	<i>Alouatta caraya</i> 0	<i>Saimiri boliviensis</i> 0	<i>Alouatta sara</i> 0	<i>Ateles chamek</i> 0
63	Ch	Bo	no	2010	2005	do	<i>Callithrix melanura</i> 1	<i>Cebus libidinosus juruanus</i> 1	<i>Callicebus donacophilus</i> 1	<i>Aotus azarae boliviensis</i> 0	<i>Alouatta caraya</i> 0	<i>Saimiri boliviensis</i> 0	<i>Alouatta sara</i> 0	<i>Ateles chamek</i> 0
64	Me	Mx	no	2006	2003	do	<i>Alouatta palliata mexicana</i> 1	<i>Ateles geoffroyi vellerosus</i> 1						
65	Me	CR	yes	2011	2005	do	<i>Ateles geoffroyi</i> 1	<i>Alouatta palliata</i> 1	<i>Cebus capucinus</i> 1					
66	Me	Mx	no	2017	2010	do	<i>Alouatta pigra</i> 1	<i>Ateles geoffroyi</i> 1						
67	Me	Mx	no	2012	2002	do	<i>Ateles geoffroyi</i> 1	<i>Alouatta pigra</i> 1						
68	Me	Mx	no	2004	2002	do	<i>Alouatta pigra</i> 0	<i>Ateles geoffroyi yucateensis</i> 1						
69	Me	Mx	no	2009	2002	do	<i>Alouatta pigra</i> 1	<i>Ateles geoffroyi yucateensis</i> 1						
70	Me	Mx	no	2011	2002	do	<i>Alouatta pigra</i> 1	<i>Ateles geoffroyi yucateensis</i> 1						
71	Me	Mx	no	2011	2002	do	<i>Alouatta pigra</i> 1	<i>Ateles geoffroyi yucateensis</i> 0						
72	Me	Mx	no	2011	2002	do	<i>Alouatta pigra</i> 0	<i>Ateles geoffroyi yucateensis</i> 1						
73	Me	Mx	no	2005	1995	do	<i>Alouatta palliata</i> 1	<i>Ateles geoffroyi</i> 0						
74	Me	Mx	yes	2012	2010	do	<i>Ateles geoffroyi</i> 1	<i>Alouatta pigra</i> 1						

75	Me	Be	no	2012	2007	do	<i>Ateles geoffroyi</i> 0	<i>Alouatta pigra</i> 1					
76	Me	CR	yes	2005	2005	do	<i>Alouatta palliata</i> 1	<i>Ateles geoffroyi</i> 1	<i>Cebus capucinus</i> 0				
77	Me	Mx	no	2003	2004	do	<i>Alouatta palliata</i> 1	<i>Ateles geoffroyi</i> 0					
78	Me	Pa	yes	2017	2000	do	<i>Cebus capucinus</i> 1	<i>Saguinus geoffroyi</i> 1	<i>Ateles geoffroyi</i> 0	<i>Alouatta palliata</i> 1			
79	Or	Co	no	2014	2011	do	<i>Alouatta seniculus</i> 1	<i>Sapajus apella</i> 1	<i>Saimiri sciureus albigena</i> 1	<i>Callicebus ornatus</i> 1	<i>Aotus brumbacki</i> 1	<i>Lagothrix lugens</i> 0	<i>Ateles belzebuth</i> 0
80	Or	Co	no	2014	2011	do	<i>Alouatta seniculus</i> 1	<i>Sapajus apella</i> 1	<i>Saimiri sciureus albigena</i> 1	<i>Callicebus ornatus</i> 1	<i>Aotus brumbacki</i> 1	<i>Lagothrix lugens</i> 0	<i>Ateles belzebuth</i> 0
81	Or	Co	no	2014	2011	do	<i>Alouatta seniculus</i> 1	<i>Sapajus apella</i> 1	<i>Saimiri sciureus albigena</i> 1	<i>Callicebus ornatus</i> 0	<i>Aotus brumbacki</i> 1	<i>Lagothrix lugens</i> 0	<i>Ateles belzebuth</i> 0
82	Or	Co	no	2014	2011	do	<i>Alouatta seniculus</i> 1	<i>Sapajus apella</i> 1	<i>Saimiri sciureus albigena</i> 1	<i>Callicebus ornatus</i> 0	<i>Aotus brumbacki</i> 0	<i>Lagothrix lugens</i> 0	<i>Ateles belzebuth</i> 0
83	Or	Co	no	2014	2011	do	<i>Alouatta seniculus</i> 1	<i>Sapajus apella</i> 1	<i>Saimiri sciureus albigena</i> 1	<i>Callicebus ornatus</i> 0	<i>Aotus brumbacki</i> 0	<i>Lagothrix lugens</i> 0	<i>Ateles belzebuth</i> 0
84	Or	Co	no	2014	2011	do	<i>Alouatta seniculus</i> 1	<i>Sapajus apella</i> 1	<i>Saimiri sciureus albigena</i> 1	<i>Callicebus ornatus</i> 1	<i>Aotus brumbacki</i> 1	<i>Lagothrix lugens</i> 0	<i>Ateles belzebuth</i> 0
85	Or	Co	no	2014	2011	do	<i>Alouatta seniculus</i> 1	<i>Sapajus apella</i> 1	<i>Saimiri sciureus albigena</i> 0	<i>Callicebus ornatus</i> 1	<i>Aotus brumbacki</i> 1	<i>Lagothrix lugens</i> 0	<i>Ateles belzebuth</i> 0
86	Or	Co	no	2014	2011	do	<i>Alouatta seniculus</i> 1	<i>Sapajus apella</i> 1	<i>Saimiri sciureus albigena</i> 1	<i>Callicebus ornatus</i> 1	<i>Aotus brumbacki</i> 1	<i>Lagothrix lugens</i> 0	<i>Ateles belzebuth</i> 0
87	Or	Co	no	2014	2011	do	<i>Alouatta seniculus</i> 1	<i>Sapajus apella</i> 1	<i>Saimiri sciureus albigena</i> 1	<i>Callicebus ornatus</i> 1	<i>Aotus brumbacki</i> 1	<i>Lagothrix lugens</i> 0	<i>Ateles belzebuth</i> 0
88	Or	Co	no	2014	2011	do	<i>Alouatta seniculus</i> 1	<i>Sapajus apella</i> 1	<i>Saimiri sciureus albigena</i> 1	<i>Callicebus ornatus</i> 0	<i>Aotus brumbacki</i> 0	<i>Lagothrix lugens</i> 0	<i>Ateles belzebuth</i> 0
89	TCM	Co	no	2017	2010	do	<i>Alouatta seniculus</i> 1	<i>Cebus capucinus</i> 1	<i>Saguinus oedipus</i> 1	<i>Ateles fusciceps</i> 0			
90	TCM	Co	no	2013	2008	do	<i>Saguinus leucopus</i> 0	<i>Alouatta seniculus</i> 1	<i>Ateles hybridus</i> 0	<i>Cebus albifrons</i> 0			
91	TCM	Co	no	2013	2008	do	<i>Saguinus leucopus</i> 1	<i>Alouatta seniculus</i> 0	<i>Ateles hybridus</i> 0	<i>Cebus albifrons</i> 0			
92	TCM	Co	no	2007	2008	do	<i>Saguinus leucopus</i> 1	<i>Alouatta seniculus</i> 1	<i>Ateles hybridus</i> 0	<i>Cebus albifrons</i> 0			

93	TCM	Co	no	2013	2008	do	<i>Saguinus leucopus</i> 1	<i>Alouatta seniculus</i> 0	<i>Ateles hybridus</i> 0	<i>Cebus albifrons</i> 0	
94	TCM	Co	no	2017	2008	do	<i>Ateles hybridus</i> 1	<i>Alouatta seniculus</i> 1	<i>Cebus albifrons</i> 1	<i>Aotus</i> sp 1	
95	TCM	Co	no	2017	2010	do	<i>Saguinus leucopus</i> 1	<i>Ateles hybridus</i> 0	<i>Cebus albifrons</i> 0	<i>Lagothrix lugens</i> 0	<i>Alouatta seniculus</i> 0
96	TCM	Co	no	2017	2010	do	<i>Saguinus leucopus</i> 1	<i>Ateles hybridus</i> 0	<i>Cebus albifrons</i> 0	<i>Lagothrix lugens</i> 0	<i>Alouatta seniculus</i> 0
97	TCM	Co	yes	2007	2006	do	<i>Alouatta seniculus</i> 1	<i>Cebus</i> spp 1	<i>Ateles hybridus</i> 1		

Table S2. Proportion of reproductive parts, vegetative parts and preys in the diet of each ecospecies. Information from Hawes and Peres (2014).

Cod	Ecospecies	Species	Reproductive parts (%)	Vegetative parts (%)	Prey (%)
Cj*	uakaries	<i>Cacajao</i> spp.	93	3	2
Ct	collared titi monkeys	<i>C. torquatus</i> , <i>Callicebus</i> spp.	90	7	3
Pi	saki monkeys	<i>Pithecia</i> spp.	89	9	1
Ch	bearded saki monkeys	<i>Chiropotes</i> spp.	93	1	3
Cf	white-fronted capuchins	<i>Cebus albifrons</i> , <i>C. capucinus</i>	82	1	17
Cp	Atlantic forest dusky titi monkeys	<i>C. personatus</i> , <i>Callicebus</i> spp.	81	16	0
At	spider monkeys	<i>Ateles</i> spp.	83	12	0
Ao	owl monkeys	<i>Aotus</i> spp.	91	3	6
Le	lion tamarins	<i>Leontopithecus</i> spp.	87	0	9
La	woolly monkeys	<i>Lagothrix</i> spp., <i>Oreonax flavicauda</i>	76	13	9
Sx*	moustached tamarins	<i>S. mystax</i> , <i>S. labiatus</i> , <i>S. imperator</i>	75	0	15
Sm	midas tamarins	<i>S. midas</i> , <i>S. niger</i>	67	0	30
So	bare-faced tamarins	<i>S. bicolor</i> , <i>S. geoffroyi</i> , <i>S. leucopus</i> , <i>S. martinsi</i> , <i>S. oedipus</i>	63	1	25
Co	wedge-capped capuchins	<i>C. kaapori</i> , <i>C. olivaceus</i>	61	6	33
Sf	saddle-back tamarins	<i>Saguinus fuscicollis</i> , <i>S. inustus</i> , <i>S. melanoleucus</i> , <i>S. nigricollis</i> , <i>S. tripartitus</i>	58	0	29
Cm	Amazonian dusky titi monkeys	<i>Callicebus moloch</i> , <i>Callicebus</i> spp.	57	34	8
Ca	brown capuchins	<i>C. apella</i> , <i>Cebus</i> spp.	52	16	30
Br	woolly spider monkeys	<i>Brachyteles</i> spp.	52	46	0
Sa	squirrel monkeys	<i>Saimiri</i> spp.	42	0	58
Al	howler monkeys	<i>Alouatta</i> spp.	43	54	0
Cg*	Goeldi's monkeys	<i>Callimico goeldii</i>	29	0	13
Mi	Amazonian marmosets	<i>Mico</i> spp.	19	0	19
Cx	Atlantic forest marmosets	<i>Callithrix</i> spp.	18	0	22
Cb*	pygmy marmosets	<i>Cebuella pygmaea</i> , <i>Callibella humilis</i>	0	0	23

*Ecospecies absents in the analysis.

Table S3. List of 97 fragments used in the analysis and their geographic coordinates in decimal degrees. Sub-regions: Amazonia (Am), Caribbean (Ca), Cerrado (Ce), Atlantic Forest (AF), Mesoamerica (Me), Orinoco (Or), Chaco (Ch), Tumbes-Chocó-Magdalena (TCM).

Fragment	Latitude	Longitude	Country	Sub-region	References
1	-22.80855376	-46.99288454	Brazil	AF	1
2	-22.77891695	-47.00155041	Brazil	AF	1
3	-21.193466	-43.699189	Brazil	AF	2
4	-23.753629	-53.13647	Brazil	AF	3
5	-20.687425	-42.8733	Brazil	AF	4
6	-6.566738	-35.131221	Brazil	AF	5
7	-13.952823	-39.451174	Brazil	AF	6
8	-15.926917	-39.635883	Brazil	AF	6
9	-21.36861111	-46.27888889	Brazil	AF	7
10	-22.89472222	-46.32361111	Brazil	AF	7
11	-21.42333618	-46.09480468	Brazil	AF	8
12	-6.758444444	-35.10827778	Brazil	AF	9
13	-8.525270448	-35.05341867	Brazil	AF	9
14	-9.757241667	-36.240175	Brazil	AF	9
15	-16.042222	-40.058889	Brazil	AF	10
16	-6.025528	-76.992694	Peru	Am	11
17	-4.30787	-49.494389	Brazil	Am	12
18	2.372988	-72.640968	Colombia	Am	13
19	-3.869943	-49.642028	Brazil	Am	14
20	-4.273274	-49.504488	Brazil	Am	15
21	-2.342269	-60.095024	Brazil	Am	16
22	-2.404463	-59.871321	Brazil	Am	16
23	-1.783361111	-59.68769444	Brazil	Am	17
24	-1.831416667	-59.68719444	Brazil	Am	17
25	-1.739361111	-59.44230556	Brazil	Am	17
26	-1.741694444	-59.70322222	Brazil	Am	17
27	-1.592694444	-59.62730556	Brazil	Am	17
28	-11.488094	-61.438953	Brazil	Am	18
29	-3.403467	-51.7363	Brazil	Am	19
30	-4.141411	-49.511967	Brazil	Am	20
31	-2.94698215	-54.80584365	Brazil	Am	21
32	-3.365571073	-54.87861993	Brazil	Am	21

33	-4.059984246	-54.91029614	Brazil	Am	21
34	-3.95	-54.86805556	Brazil	Am	21
35	-11.715918	-61.486929	Brazil	Am	22
36	10.04	-74.974944	Colombia	Ca	23
37	10.635422	-75.246621	Colombia	Ca	24
38	9.459337	-75.361197	Colombia	Ca	25
39	9.473889	-75.348889	Colombia	Ca	25
40	9.587543181	-75.33680657	Colombia	Ca	26
41	9.498810544	-75.38619036	Colombia	Ca	26
42	9.576150463	-75.46742552	Colombia	Ca	26
43	9.435677532	-75.37333609	Colombia	Ca	26
44	9.426915127	-75.45255531	Colombia	Ca	26
45	9.940501976	-75.10090395	Colombia	Ca	26
46	-21.580303	-47.807235	Brazil	Ce	27
47	-20.392896	-54.587635	Brazil	Ce	28
48	-21.11421	-47.66381	Brazil	Ce	29
49	-19.257778	-43.516944	Brazil	Ce	30
50	-18.925748	-48.154949	Brazil	Ce	31
51	-21.218923	-47.846245	Brazil	Ce	32
52	-22.633639	-48.289997	Brazil	Ce	33
53	-22.665924	-48.192556	Brazil	Ce	33
54	-22.694422	-48.084542	Brazil	Ce	33
55	-17.92374794	-63.16547971	Bolivia	Ch	34
56	-17.92697204	-63.14819431	Bolivia	Ch	34
57	-17.78021498	-63.06639822	Bolivia	Ch	34
58	-17.81188633	-62.95304426	Bolivia	Ch	34
59	-17.82122383	-62.95192874	Bolivia	Ch	34
60	-17.84435341	-62.92806677	Bolivia	Ch	34
61	-17.91027807	-62.93607955	Bolivia	Ch	34
62	-17.89008947	-62.91511188	Bolivia	Ch	34
63	-17.88716937	-62.90817504	Bolivia	Ch	34
64	18.37934037	-94.76922254	Mexico	Me	35
65	10.467944	-83.954119	Costa Rica	Me	36
66	16.181003	-90.874028	Mexico	Me	37
67	18.273611	-90.731944	Mexico	Me	38
68	18.46666667	-91.18333333	Mexico	Me	39
69	18.15	-91.61666667	Mexico	Me	39

70	18.58333333	-88.45	Mexico	Me	39
71	17.93333333	-88.86666667	Mexico	Me	39
72	21.23333333	-88.55	Mexico	Me	39
73	18.686792	-95.188451	Mexico	Me	40
74	17.305222	-88.446236	Belize	Me	41
75	16.370667	-88.494479	Belize	Me	41
76	10.411715	-84.114233	Costa Rica	Me	42
77	17.79458	-93.109908	Mexico	Me	43
78	9.154959	-79.843718	Panama	Me	44
79	3.608744	-73.638841	Colombia	Or	45
80	3.616664	-73.646057	Colombia	Or	45
81	3.61726	-73.641334	Colombia	Or	45
82	3.59999	-73.625466	Colombia	Or	45
83	3.593552	-73.633222	Colombia	Or	45
84	3.594236	-73.624502	Colombia	Or	45
85	3.599476	-73.64619	Colombia	Or	45
86	3.578006	-73.444488	Colombia	Or	45
87	3.565448	-73.448329	Colombia	Or	45
88	3.561927	-73.475485	Colombia	Or	45
89	7.943641	-76.251857	Colombia	TCM	46
90	5.67503	-74.7744	Colombia	TCM	47
91	5.641332	-74.836359	Colombia	TCM	47
92	5.57532	-74.95763	Colombia	TCM	47
93	5.33933	-74.73547	Colombia	TCM	47
94	6.712071	-74.14557	Colombia	TCM	48
95	6.897457	-74.578329	Colombia	TCM	49
96	6.907453	-74.572368	Colombia	TCM	49
97	6.048338	-74.265375	Colombia	TCM	50

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