

Table S1. Top ten evolutionary models of primate social organisation. The top ten models account for 57% of the posterior sample. Z = zero. 0s and 1s indicate distinct non-zero transition rates¹³. Subscripts on the rate coefficients correspond to the transitions between the four states of social organisation (1= solitary, 2 = pair-living, 3 = single-male, 4 = multi-male). Frequency = visits to the model in the posterior distribution of 50,000.

Model	Rate coefficients												Frequency	Probability density	Cumulative density
	q ₁₂	q ₁₃	q ₁₄	q ₂₁	q ₂₃	q ₂₄	q ₃₁	q ₃₂	q ₃₄	q ₄₁	q ₄₂	q ₄₃			
1	Z	Z	0	Z	Z	Z	Z	Z	0	Z	0	0	9,246	0.18	0.18
2	Z	Z	0	Z	Z	0	Z	Z	0	Z	0	0	7,402	0.15	0.33
3	Z	Z	Z	0	Z	0	Z	Z	0	Z	0	0	2,101	0.04	0.37
4	Z	Z	0	Z	Z	0	Z	0	0	Z	0	0	2,100	0.04	0.42
5	Z	Z	0	0	Z	0	Z	Z	0	Z	0	0	2,087	0.04	0.46
6	Z	Z	0	Z	0	0	Z	Z	0	Z	0	0	1,621	0.03	0.49
7	Z	Z	0	0	Z	0	Z	Z	0	Z	0	0	1,331	0.03	0.52
8	Z	Z	0	Z	Z	Z	0	Z	0	Z	0	0	1,097	0.02	0.54
9	Z	Z	0	Z	Z	0	0	Z	0	Z	0	0	662	0.01	0.55
10	Z	Z	0	Z	0	0	Z	0	0	Z	0	0	654	0.01	0.57
50	Z	Z	0	Z	Z	Z	Z	0	1	Z	1	0	52	0.001	0.67

Table S2. Top ten models of correlated evolution between activity and social organisation in primates. The top ten models account for 36% of the posterior sample. q_{ij} indicates rate of change between states (1 = solitary/nocturnal; 2 = solitary/diurnal; 3 = social/nocturnal; 4 = social/diurnal). Z= zero rate; 0s and 1s indicate distinct non-zero transition rates. Independent models represent 0.00% of all models visited (0.36% expected by chance).

Model	Rate coefficients									Frequency	Probability	Cumulative probability
	q_{12}	q_{13}	q_{21}	q_{24}	q_{31}	q_{34}	q_{42}	q_{43}				
1	1	1	1	0	1	0	Z	1	2068	0.05		0.05
2	1	1	1	0	1	1	Z	1	1730	0.04		0.09
3	1	1	Z	0	Z	0	Z	1	1606	0.04		0.14
4	0	0	Z	1	Z	1	Z	0	1566	0.04		0.17
5	1	1	1	0	Z	Z	Z	1	1450	0.04		0.21
6	1	1	Z	0	Z	Z	Z	1	1426	0.04		0.25
7	0	0	0	1	0	1	Z	0	1233	0.03		0.28
8	1	1	Z	0	1	0	Z	1	1165	0.03		0.31
9	1	1	Z	0	1	1	Z	1	1011	0.03		0.33
10	0	0	0	1	0	0	Z	0	1001	0.03		0.36
50	1	1	Z	1	Z	0	Z	1	179	0.004		0.58

Table S3. Top ten models of correlated evolution between dispersal and social organisation in primates. The top ten models account for 47% of the posterior sample. q_{ij} indicates rate of change between states (1 = solitary/bisexual dispersal; 2 = solitary/sex-biased; 3 = social/bisexual; 4 = social/sex-biased). Z= zero rate; 0s and 1s indicate distinct non-zero transition rates. Independent models represent 0.6% of all models visited (0.36% expected by chance).

Model	Rate coefficients								Frequency	Probability	Cumulative probability
	q_{12}	q_{13}	q_{21}	q_{24}	q_{31}	q_{34}	q_{42}	q_{43}			
1	0	0	0	Z	Z	0	0	0	11,381	0.23	0.23
2	0	0	0	0	Z	0	0	0	4,116	0.08	0.31
3	0	0	0	Z	0	0	Z	0	2,773	0.06	0.37
4	0	0	0	0	0	0	Z	0	1,010	0.02	0.39
5	Z	0	1	Z	Z	0	Z	0	825	0.02	0.40
6	1	1	0	Z	Z	0	1	1	656	0.01	0.42
7	0	0	1	Z	Z	1	0	1	635	0.01	0.43
8	1	1	0	Z	Z	0	1	0	632	0.01	0.44
9	0	0	1	Z	Z	1	0	0	624	0.01	0.45
10	0	1	0	Z	Z	0	1	1	624	0.01	0.47
50	0	0	0	Z	Z	0	1	0	163	0.003	0.70

Table S4. Top ten models for the evolution of stable sociality. The top ten models account for 96% of the posterior sample. Z = zero. 0s and 1s indicate a non-zero transition rate¹³. Subscripts on the rate coefficients correspond to the transitions between states (0= solitary, 1 = unstable social, 2 = stable social). Frequency = visits to the model in the posterior distribution of 50,000.

Model	Rate coefficients						Frequency	probability	Cumulative probability
	q ₀₁	q ₀₂	q ₁₀	q ₁₂	q ₂₀	q ₂₁			
1	0	Z	Z	0	Z	0	35,731	0.71	0.71
2	0	0	Z	0	Z	0	9,489	0.19	0.90
3	0	0	0	0	Z	0	591	0.01	0.92
4	Z	0	Z	0	Z	0	518	0.01	0.93
5	0	0	Z	0	0	0	485	0.01	0.94
6	0	Z	0	0	Z	0	464	0.01	0.95
7	0	0	Z	1	Z	1	322	0.01	0.95
8	1	1	Z	0	Z	0	249	0.00	0.96
9	1	1	Z	1	Z	0	148	0.00	0.96
10	0	Z	Z	0	Z	1	126	0.00	0.96
50	0	1	Z	0	1	0	9	0.00	1.00

Table S5. Mean rates with standard errors for the two co-evolution models. Median rates are also reported in parentheses.

Model	q_{12}	q_{21}	q_{13}	q_{31}	q_{24}	q_{42}	q_{34}	q_{43}
Social-Activity	$0.003 \pm 4.7 \times 10^{-5}$ (0.003)	$0.008 \pm 6.0 \times 10^{-4}$ (0.002)	$0.003 \pm 57.2 \times 10^{-5}$ (0.003)	$0.004 \pm 4.0 \times 10^{-4}$ (0.002)	$0.060 \pm 3.5 \times 10^{-3}$ (0.050)	$0.004 \pm 3.0 \times 10^{-5}$ (0)	$0.030 \pm 2.0 \times 10^{-3}$ (0.025)	$0.002 \pm 7.2 \times 10^{-5}$ (0.003)
Social-Dispersal	$0.007 \pm 6.0 \times 10^{-5}$ (0.006)	$0.008 \pm 6.6 \times 10^{-5}$ (0.007)	$0.006 \pm 6.0 \times 10^{-5}$ (0.006)	$0.001 \pm 1.5 \times 10^{-4}$ (0)	$0.002 \pm 7.2 \times 10^{-5}$ (0)	$0.004 \pm 2.0 \times 10^{-4}$ (0.004)	$0.009 \pm 6.2 \times 10^{-5}$ (0.008)	$0.007 \pm 7.0 \times 10^{-5}$ (0.007)

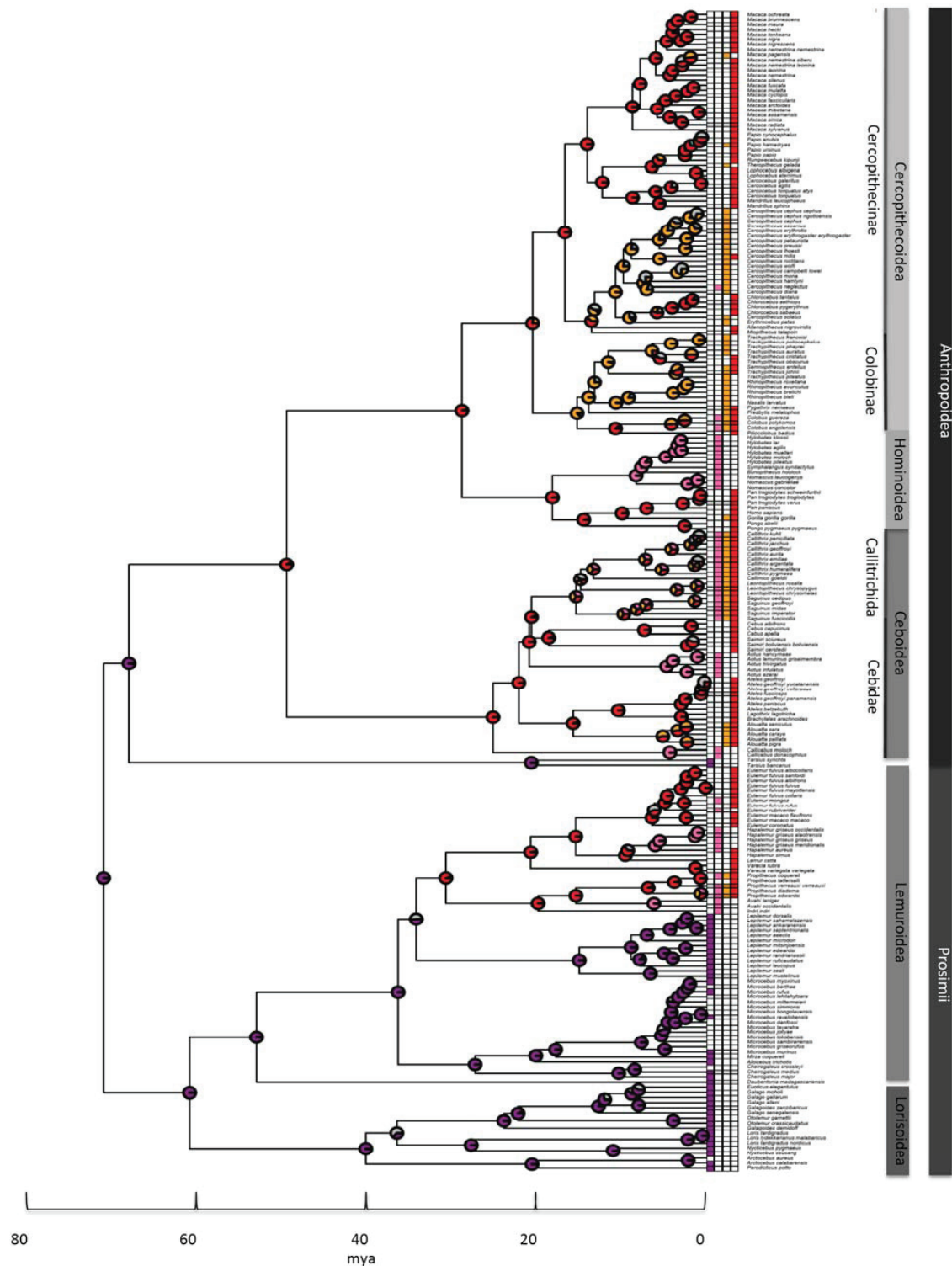


Figure S1. Primate phylogeny showing ancestral state reconstructions for sociality under the RJ MCMC derived model of evolution. Pie charts show the probability of the states at each node – solitary (purple), uni-male (orange), multi-male (red), pair-living (pink). Where the probability of the node is less than 1 the grey segment shows the proportion of trees where that node does not exist.

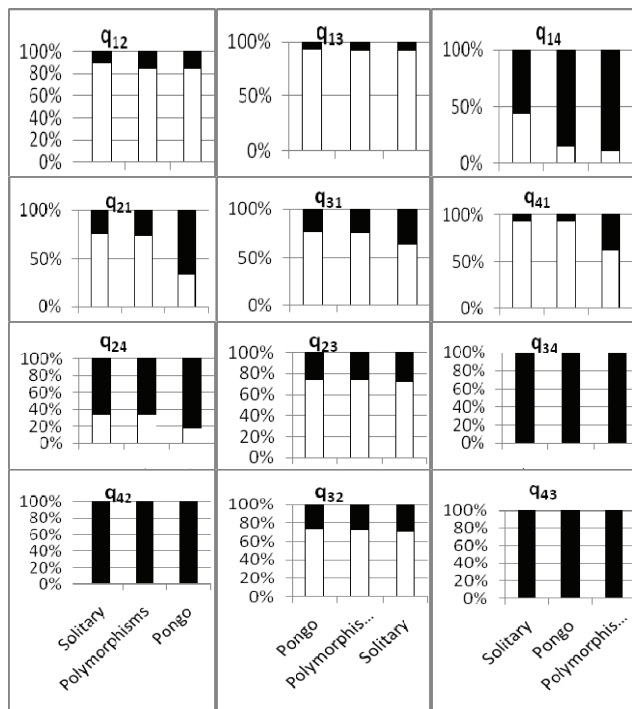
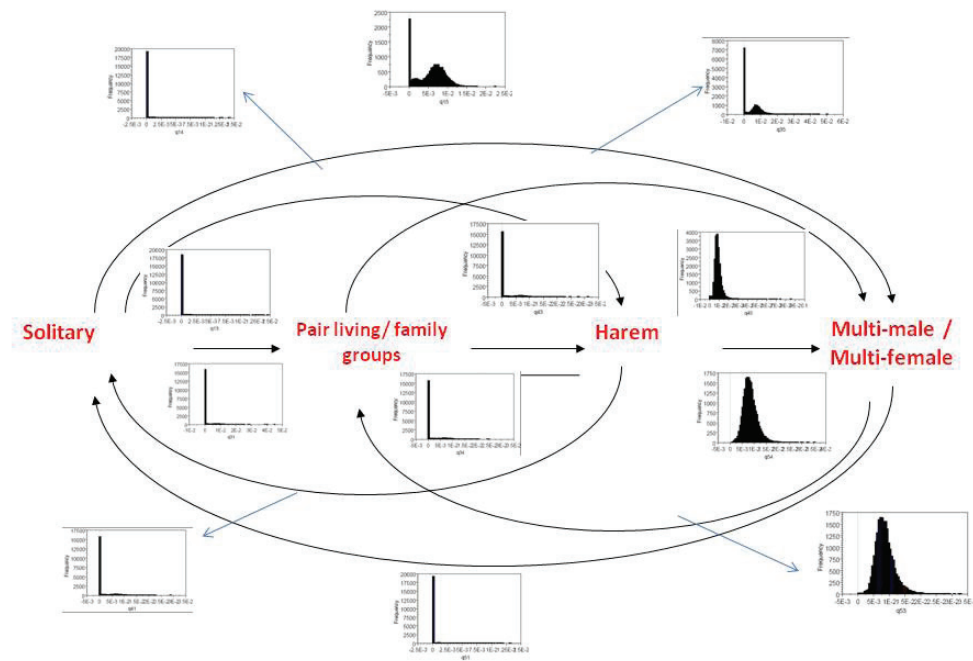
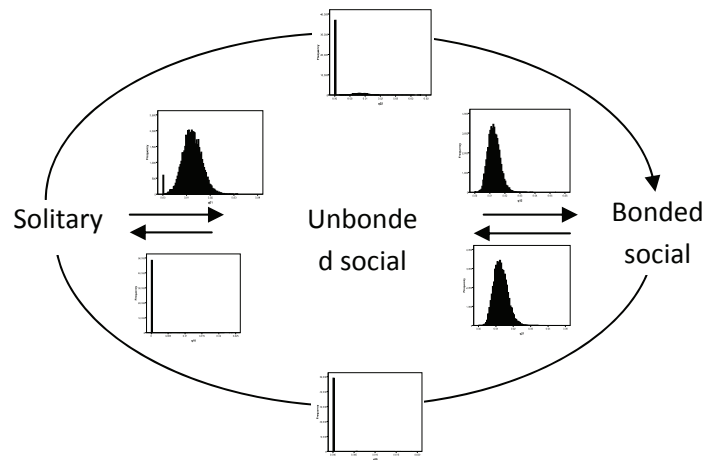


Figure S2. Model selection under alternative sociality classification schemes. Dark bars represent % of model visits to a non-zero transition rate between states, unfilled bars represent % visits with a zero transition rate between states. Rate coefficients correspond to social grouping categories (1= solitary, 2 = pair-living, 3 = harem, 4 = multi-male).



a.



b.

Figure S3. Posterior probability of transition rates based on the RJ model runs for models of a) social evolution, and b) evolution of group stability.

Table S6. Species data for social grouping pattern, activity and natal dispersal. Social polymorphism categories nocturnal species both in terms of foraging group and sleeping associations. Social Pongo classifies all nocturnal species as social foragers, whereas Pongo is classified as multi-male. Social solitary classifies all species based on foraging party composition only. Social categories: MMMF- multi-male multi-female groups, UM- unimale groups, PL- pair-living, S- solitary.

Family	Species Name	Social polymorphism	Social Pongo	Social solitary	Activity	Natal Dispersal	Stable groups	References
Daubentonidae Cheirogaleidae	Daubentonidae madagascariensis	S, PL	S	S	Nocturnal	Bi-sexual	No	Muller and Thalmann 2000; Gould and Sauter 2007
	Allocebus trichotis	S, PL	S	S	Nocturnal	Bi-sexual	No	Muller and Thalmann 2000
	Cheirogaleus crossleyi	-	-	-	Diurnal	-	-	Muller and Thalmann 2000; Gould and Sauter 2007
	Cheirogaleus major	S	S	S	Diurnal	Bi-sexual	No	Muller and Thalmann 2000; Gould and Sauter 2007
	Cheirogaleus medius	S, PL	S	S	Diurnal	Bi-sexual	No	Muller and Thalmann 2000; Gould and Sauter 2007
	Microcebus berthae	-	-	-	Nocturnal	-	Yes	Muller and Thalmann 2000; Gould and Sauter 2007
	Microcebus bongolavensis	-	-	-	Nocturnal	-	-	Muller and Thalmann 2000; Gould and Sauter 2007
	Microcebus danfossii	-	-	-	Nocturnal	-	-	Muller and Thalmann 2000; Gould and Sauter 2007
	Microcebus griseorufus	-	-	-	Nocturnal	-	-	Gelin 2008; Muller and Thalmann 2000; Gould and Sauter 2007
	Microcebus jollyae	-	-	-	Nocturnal	-	-	Muller and Thalmann 2000; Gould and Sauter 2007
	Microcebus lehilahytsara	-	-	-	Nocturnal	-	-	Muller and Thalmann 2000; Gould and Sauter 2007
	Microcebus lokobensis	-	-	-	Nocturnal	-	-	Muller and Thalmann 2000; Gould and Sauter 2007
	Microcebus mittermeieri	-	-	-	Nocturnal	-	-	Muller and Thalmann 2000; Gould and Sauter 2007
	Microcebus murinus	S, MMMF	S	S	Nocturnal	Sex-biased	Yes	Rodriguez 2003; Muller and Thalmann 2000; Gould and Sauter 2007
	Microcebus myoxinus	S	S	S	Nocturnal	-	-	Muller and Thalmann 2000; Gould and Sauter 2007
	Microcebus ravelobensis	S, MMMF	S	S	Nocturnal	-	-	Muller and Thalmann 2000; Gould and Sauter 2007
	Microcebus rufus	S	S	S	Nocturnal	Sex-biased	No	Atzalis 2000; Muller and Thalmann 2000; Gould and Sauter 2007
	Microcebus sambiranensis	-	-	-	Nocturnal	-	-	Muller and Thalmann 2000; Gould and Sauter 2007
	Microcebus simmonsii	-	-	-	Nocturnal	-	-	Muller and Thalmann 2000; Gould and Sauter 2007
	Microcebus tavaratra	-	-	-	Nocturnal	-	-	Muller and Thalmann 2000; Gould and Sauter 2007
	Mirza coquereli	S	S	S	Nocturnal	Sex-biased	No	Kappeler et al 2002; Gould and Sauter 2007
	Avahi laniger	PL	PL	PL	Nocturnal	Bi-sexual	-	Muller and Thalmann 2000; Gould and Sauter 2007
	Avahi occidentalis	PL	PL	PL	Nocturnal	Bi-sexual	-	Muller and Thalmann 2000; Gould and Sauter 2007
	Indri indri	PL	PL	PL	Diurnal	Bi-sexual	-	Muller and Thalmann 2000; Gould and Sauter 2007
Indridae	Propithecus coquereli	PL, UM, MMMF	PL, UM, MMMF	PL, UM, MMMF	Diurnal	Bi-sexual	-	Muller and Thalmann 2000; Gould and Sauter 2007
	Propithecus diademata	PL, UM, MMMF	PL, UM, MMMF	PL, UM, MMMF	Diurnal	Bi-sexual	-	Muller and Thalmann 2000; Gould and Sauter 2007
	Propithecus edwardsi	PL, UM, MMMF	PL, UM, MMMF	PL, UM, MMMF	Diurnal	Bi-sexual	No	Morell et al 2009; Muller and Thalmann 2000; Gould and Sauter 2007
	Propithecus tattersalli	MMMF	MMMF	MMMF	Diurnal	Bi-sexual	-	Muller and Thalmann 2000; Gould and Sauter 2007
	Propithecus verreauxi verreauxi	PL, UM, MMMF	PL, UM, MMMF	PL, UM, MMMF	Diurnal	Bi-sexual	No	Jolly et al 1982; Muller and Thalmann 2000; Gould and Sauter 2007
Lemuridae	Eulemur coronatus	MMMF	MMMF	MMMF	Diurnal	Bi-sexual	-	Muller and Thalmann 2000; Gould and Sauter 2007
	Eulemur fulvus albifrons	MMMF	MMMF	MMMF	Diurnal	Sex-biased	-	Muller and Thalmann 2000; Gould and Sauter 2007
	Eulemur fulvus albocollaris	MMMF	MMMF	MMMF	Diurnal	Sex-biased	-	Muller and Thalmann 2000; Gould and Sauter 2007
	Eulemur fulvus collaris	MMMF	MMMF	MMMF	Diurnal	Sex-biased	-	Muller and Thalmann 2000; Gould and Sauter 2007
	Eulemur fulvus fulvus	MMMF	MMMF	MMMF	Diurnal	Sex-biased	-	Muller and Thalmann 2000; Gould and Sauter 2007
	Eulemur fulvus mayottensis	MMMF	MMMF	MMMF	Diurnal	Sex-biased	-	Muller and Thalmann 2000; Gould and Sauter 2007
	Eulemur fulvus rufus	MMMF	MMMF	MMMF	Diurnal	Sex-biased, Bi-sexual	No	Ehardt and Overdorff 2008; Muller and Thalmann 2000
	Eulemur fulvus sanfordi	MMMF	MMMF	MMMF	Diurnal	Sex-biased	-	Muller and Thalmann 2000; Gould and Sauter 2007
	Eulemur macaco flavifrons	MMMF	MMMF	MMMF	Diurnal	Bi-sexual	-	Muller and Thalmann 2000; Gould and Sauter 2007
	Eulemur macaco macaco	MMMF	MMMF	MMMF	Diurnal	Bi-sexual	-	Muller and Thalmann 2000; Gould and Sauter 2007
	Eulemur mongoz	PL, MMMF	PL, MMMF	PL, MMMF	Diurnal	Bi-sexual	No	Muller and Thalmann 2000; Gould and Sauter 2007
	Eulemur rubriventer	PL	PL	PL	Diurnal	Bi-sexual	-	Muller and Thalmann 2000; Gould and Sauter 2007
	Hapalemur aureus	PL, MMMF	PL, MMMF	PL, MMMF	DiurnalNocturnal	Bi-sexual	No	Tan 2000; Muller and Thalmann 2000; Tan 2006
	Hapalemur griseus alotrensensis	PL	PL	PL	DiurnalNocturnal	Bi-sexual	No	Matschie et al. 2000; Muller and Thalmann 2000; Tan 2006
	Hapalemur griseus griseus	PL	PL	PL	DiurnalNocturnal	Bi-sexual	-	Muller and Thalmann 2000; Tan 2006
	Hapalemur griseus meridionalis	PL	PL	PL	DiurnalNocturnal	Bi-sexual	-	Muller and Thalmann 2000; Tan 2006
	Hapalemur griseus occidentalis	PL	PL	PL	DiurnalNocturnal	Bi-sexual	-	Muller and Thalmann 2000; Tan 2006
	Hapalemur simus	MMMF	MMMF	MMMF	DiurnalNocturnal	Bi-sexual	-	Muller and Thalmann 2000; Tan 2006
	Lemur catta	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Sussman 1992; Muller and Thalmann 2000; Gould and Sauter 2007
	Varecia rubra	MMMF	MMMF	MMMF	Diurnal	Sex-biased	-	Gould and Sauter 2007
	Varecia variegata variegata	MMMF	MMMF	MMMF	Diurnal	Sex-biased	No	Erhardt and Overdorff 2008; Gould and Sauter 2007
Leptemuridae	Leptemur aecalis	S	S	S	Nocturnal	-	No	Muller and Thalmann 2000
	Leptemur ankaransensis	S	S	S	Nocturnal	-	No	Muller and Thalmann 2000
	Leptemur dorsalis	S	S	S	Nocturnal	Bi-sexual	No	Muller and Thalmann 2000
	Leptemur edwardsi	S	S	S	Nocturnal	Bi-sexual	No	Muller and Thalmann 2000
	Leptemur leucopus	S	S	S	Nocturnal	Bi-sexual	No	Muller and Thalmann 2000
	Leptemur micridon	S	S	S	Nocturnal	Bi-sexual	No	Muller and Thalmann 2000
	Leptemur mitsinjoensis	S	S	S	Nocturnal	-	No	Muller and Thalmann 2000
	Leptemur mustelinus	S	S	S	Nocturnal	Bi-sexual	No	Muller and Thalmann 2000
	Leptemur randrianasoli	S	S	S	Nocturnal	-	No	Muller and Thalmann 2000
	Leptemur ruficaudatus	S	S	S	Nocturnal	Bi-sexual	No	Muller and Thalmann 2000
	Leptemur sahalazensis	S	S	S	Nocturnal	-	No	Muller and Thalmann 2000
	Leptemur seali	S	S	S	Nocturnal	-	No	Muller and Thalmann 2000
	Leptemur septentrionalis	S	S	S	Nocturnal	Bi-sexual	No	Muller and Thalmann 2000
	Arctocebus aureus	-	-	-	Nocturnal	-	-	Muller and Thalmann 2000; Nekaris and Bearder 2007
	Arctocebus calabarensis	-	-	-	Nocturnal	Bi-sexual	No	Muller and Thalmann 2000; Nekaris and Bearder 2007
	Loris lydekkerianus malabaricus	S, PL	S	S	Nocturnal	-	-	Nekaris and Bearder 2007
	Loris tardigradus	S, PL	S	S	Nocturnal	Bi-sexual	-	Nekaris and Bearder 2007
	Loris tardigradus nordicus	S, PL	S	S	Nocturnal	-	-	Nekaris and Bearder 2007
	Nycticebus coucang	S	S	S	Nocturnal	Bi-sexual	No	Muller and Thalmann 2000; Nekaris and Bearder 2007
	Nycticebus pygmaeus	S	S	S	Nocturnal	Bi-sexual	No	Muller and Thalmann 2000; Nekaris and Bearder 2007
	Perodicticus potto	S	S	S	Nocturnal	Bi-sexual	-	Muller and Thalmann 2000; Nekaris and Bearder 2007
Galagidae	Euoticus elegantulus	S, UM	S	S	Nocturnal	Sex-biased	No	Muller and Thalmann 2000; Nekaris and Bearder 2007
	Galago alleni	S, UM	S	S	Nocturnal	Sex-biased	No	Muller and Thalmann 2000; Nekaris and Bearder 2007
	Galago gallarum	S	S	S	Nocturnal	-	No	Muller and Thalmann 2000; Nekaris and Bearder 2007
	Galagoides demidoff	S, PL, UM	S	S	Nocturnal	Sex-biased	No	Muller and Thalmann 2000; Nekaris and Bearder 2007
	Galagoides zanzibaricus	S, PL, UM	S	S	Nocturnal	Bi-sexual	No	Muller and Thalmann 2000; Nekaris and Bearder 2007
	Galago moholi	S, UM	S	S	Nocturnal	Sex-biased	No	Muller and Thalmann 2000; Nekaris and Bearder 2007
	Galago senegalensis	S, UM	S	S	Nocturnal	Sex-biased	No	Muller and Thalmann 2000; Nekaris and Bearder 2007
	Otolemur crassicaudatus	S, PL, UM	S	S	Nocturnal	Sex-biased	No	Muller and Thalmann 2000; Nekaris and Bearder 2007
	Otolemur garnettii	S	S	S	Nocturnal	Sex-biased	No	Muller and Thalmann 2000; Nekaris and Bearder 2007
	Tarsius bancanus	S	S	S	Nocturnal	Bi-sexual	No	Crompton & Andras 1987; Gursky 2007
	Tarsius syrichta	S	S	S	Nocturnal	Bi-sexual	No	Nei-Arbelide et al. 2002; Gursky 2007
	Callicebus donacophilus	PL	PL	PL	Diurnal	Bi-sexual	-	Norcock 2007
	Callicebus moloch	PL	PL	PL	Diurnal	Bi-sexual	Yes	Wright 1984; Mason & Mendoza 1991; Kinsey 1997; Bossuyt 2002
Aotidae	Aotus azarai	PL	PL	PL	Nocturnal	Bi-sexual	No	Fernandez-Duque and Huntington 2002; Fernandez-Duque 2007; Fernandez-Duque 2009
	Aotus inflatus	PL	PL	PL	Nocturnal	Bi-sexual	No	Fernandez-Duque and Huntington 2002; Fernandez-Duque 2007
	Aotus lemniscatus griseimembra	PL	PL	PL	Nocturnal	Bi-sexual	No	Fernandez-Duque and Huntington 2002; Fernandez-Duque 2007
	Aotus nancymae	PL	PL	PL	Nocturnal	Bi-sexual	No	Fernandez-Duque and Huntington 2002; Fernandez-Duque 2007
	Aotus trivirgatus	PL	PL	PL	Nocturnal	Bi-sexual	No	Fernandez-Duque and Huntington 2002; Fernandez-Duque 2007
Cebidae	Callicebus gouldii	PL, UM, MMMF	PL, UM, MMMF	PL, UM, MMMF	Diurnal	Bi-sexual	-	Porter et al 2001
	Callicebus argentatus	PL, UM, MMMF	PL, UM, MMMF	PL, UM, MMMF	Diurnal	Bi-sexual	No	Ferrari and Lopes-Ferrari 1989
	Callicebus auratus	PL, UM, MMMF	PL, UM, MMMF	PL, UM, MMMF	Diurnal	Bi-sexual	No	Ferrari and Lopes-Ferrari 1989
	Callicebus emiliae	PL, UM, MMMF	PL, UM, MMMF	PL, UM, MMMF	Diurnal	Bi-sexual	No	Ferrari and Lopes-Ferrari 1989
	Callicebus geoffroyi	PL, UM, MMMF	PL, UM, MMMF	PL, UM, MMMF	Diurnal	Bi-sexual	No	Ferrari and Lopes-Ferrari 1989
	Callicebus humeralifera	PL, UM, MMMF	PL, UM, MMMF	PL, UM, MMMF	Diurnal	Bi-sexual	No	Ferrari and Lopes-Ferrari 1989
	Callicebus jachius	PL, UM, MMMF	PL, UM, MMMF	PL, UM, MMMF	Diurnal	Bi-sexual	No	Ferrari 2009; Ferrari and Lopes-Ferrari 1989
	Callicebus kuhli	PL, UM, MMMF	PL, UM, MMMF	PL, UM, MMMF	Diurnal	Bi-sexual	No	Ferrari and Lopes-Ferrari 1989
	Callicebus penicillatus	PL, UM, MMMF	PL, UM, MMMF	PL, UM, MMMF	Diurnal	Bi-sexual	No	Ferrari and Lopes-Ferrari 1989
	Callicebus pygmaeus	PL, UM, MMMF	PL, UM, MMMF	PL, UM, MMMF	Diurnal	Bi-sexual	No	Ferrari and Lopes-Ferrari 1989
	Cebus albifrons	MMMF	MMMF	MMMF	Diurnal	Sex-biased	-	Jack 2007
	Cebus apella	MMMF	MMMF	MMMF	Diurnal	Sex-biased	-	Kinsey 1997; Janson 1990; Jack 2007
	Cebus capucinus	MMMF	MMMF	MMMF	Diurnal	Sex-biased	-	Jack and Feldman 2009; Jack and Feldman 2004; Jack 2007
	Leontopithecus chrysomelas	PL, UM, MMMF	PL, UM, MMMF	PL, UM, MMMF	Diurnal	Bi-sexual	No	Raboy 2002; Digby et al 2007
	Leontopithecus chrysopygus	PL, UM, MMMF	PL, UM, MMMF	PL, UM, MMMF	Diurnal	Bi-sexual	-	Digby et al 2007
	Leontopithecus rosalia	PL, UM, MMMF	PL, UM, MMMF	PL, UM, MMMF	Diurnal	Bi-sexual	Yes	Baker & Dietz 1996; Digby et al 2007
	Saguinus fuscicollis	PL, UM, MMMF	PL, UM, MMMF	PL, UM, MMMF	Diurnal	Bi-sexual	No	Garber 1994
	Saguinus geoffroyi	PL, UM, MMMF	PL, UM, MMMF	PL, UM, MMMF	Diurnal	Bi-sexual	No	Garber 1994
	Saguinus imperator	PL, UM, MMMF	PL, UM, MMMF	PL, UM, MMMF	Diurnal	Bi-sexual	No	Garber 1994
	Saguinus midas	PL, UM, MMMF	PL, UM, MMMF	PL, UM, MMMF	Diurnal	Bi-sexual	No	Garber 1994
	Saguinus oedipus	PL, UM, MMMF	PL, UM, MMMF	PL, UM, MMMF	Diurnal	Bi-sexual	No	Garber 1994
	Saimiri boliviensis boliviensis	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Mitchell 1994; Boninski 2005
	Saimiri oerstedii	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Boninski et al 2005
	Saimiri sciureus	MMMF	MMMF	MMMF	Diurnal	Bi-sexual	No	Boninski et al 2005

Family	Species Name	Social polymorphism	Social Pongo	Social solitary	Activity	Natal Dispersal	Stable groups	References
Atelidae	Alouatta caraya	UM, MMMF	UM, MMMF	UM, MMMF	Diurnal	Bi-sexual	-	DiFiore and Campbell 2007
	Alouatta palliata	UM, MMMF	UM, MMMF	UM, MMMF	Diurnal	Bi-sexual	No	Glendon 1992; DiFiore and Campbell 2007
	Alouatta pigra	UM, MMMF	UM, MMMF	UM, MMMF	Diurnal	Bi-sexual	-	DiFiore and Campbell 2007
	Alouatta sara	UM, MMMF	UM, MMMF	UM, MMMF	Diurnal	Bi-sexual	-	DiFiore and Campbell 2007
	Alouatta seniculus	UM, MMMF	UM, MMMF	UM, MMMF	Diurnal	Bi-sexual	Yes	Crockett 1996; Pope 1992
	Ateles belzebuth	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Nunes and Chapman 1997; DiFiore 2009
	Ateles fusciceps	MMMF	MMMF	MMMF	Diurnal	Sex-biased	-	DiFiore and Campbell 2007
	Ateles geoffroyi	MMMF	MMMF	MMMF	Diurnal	Sex-biased	-	DiFiore and Campbell 2007
	Ateles geoffroyi panamensis	MMMF	MMMF	MMMF	Diurnal	Sex-biased	-	DiFiore and Campbell 2007
	Ateles geoffroyi vellerosus	MMMF	MMMF	MMMF	Diurnal	Sex-biased	-	DiFiore and Campbell 2007
	Ateles geoffroyi yucatanensis	MMMF	MMMF	MMMF	Diurnal	Sex-biased	-	DiFiore and Campbell 2007
	Ateles paniscus	MMMF	MMMF	MMMF	Diurnal	Sex-biased	-	DiFiore and Campbell 2007
	Brachyteles arachnoides	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Strier 1991; Strier 1996
	Lagothrix lagotricha	MMMF	MMMF	MMMF	Diurnal	Sex-biased	No	Nishimura 2003; DiFiore and Fleischer 2005
	Allenopithecus nigroviridis	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Enstam and Isbell 2007
	Cercopithecus ascanius	UM	UM	UM	Diurnal	Sex-biased	Yes	Enstam and Isbell 2007
	Cercopithecus campbelli lowei	UM	UM	UM	Diurnal	Sex-biased	Yes	Enstam and Isbell 2007
	Cercopithecus cephus	UM	UM	UM	Diurnal	Sex-biased	Yes	Enstam and Isbell 2007
	Cercopithecus cephus cephus	UM	UM	UM	Diurnal	Sex-biased	Yes	Enstam and Isbell 2007
	Cercopithecus cephus ngottoensis	UM	UM	UM	Diurnal	Sex-biased	Yes	Enstam and Isbell 2007
	Cercopithecus diana	UM	UM	UM	Diurnal	Sex-biased	Yes	Enstam and Isbell 2007
	Cercopithecus erythrogaster erythrogaster	UM	UM	UM	Diurnal	Sex-biased	Yes	Enstam and Isbell 2007
	Cercopithecus erythrotis	UM	UM	UM	Diurnal	Sex-biased	Yes	Enstam and Isbell 2007
	Cercopithecus hamlyni	UM	UM	UM	Diurnal	Sex-biased	Yes	Enstam and Isbell 2007
	Cercopithecus lhoesti	UM	UM	UM	Diurnal	Sex-biased	Yes	Enstam and Isbell 2007
Cercopithecidae	Cercopithecus mitis	UM, MMMF	UM, MMMF	UM, MMMF	Diurnal	Sex-biased	Yes	Enstam and Isbell 2007
	Cercopithecus mona	UM	UM	UM	Diurnal	Sex-biased	Yes	Enstam and Isbell 2007
	Cercopithecus neglectus	PL, UM	PL, UM, ,	PL, UM, ,	Diurnal	Sex-biased	Yes	Enstam and Isbell 2007
	Cercopithecus nictitans	UM	UM	UM	Diurnal	Sex-biased	Yes	Enstam and Isbell 2007
	Cercopithecus petaurista	UM	UM	UM	Diurnal	Sex-biased	Yes	Enstam and Isbell 2007
	Cercopithecus preussi	UM	UM	UM	Diurnal	Sex-biased	Yes	Enstam and Isbell 2007
	Cercopithecus solatus	UM	UM	UM	Diurnal	Sex-biased	Yes	Enstam and Isbell 2007
	Cercopithecus woffi	UM	UM	UM	Diurnal	Sex-biased	Yes	Enstam and Isbell 2007
	Chlorocebus aethiops	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Enstam and Isbell 2007; Cheney & Seyfarth 1990
	Chlorocebus pygerythrus	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Enstam and Isbell 2006
	Chlorocebus sabaeus	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Enstam and Isbell 2006
	Chlorocebus tantulus	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Enstam and Isbell 2006
	Erythrocebus patas	UM, ,	UM, ,	UM, ,	Diurnal	Sex-biased	Yes	Enstam and Isbell 2007
	Miopithecus talapoin	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Enstam and Isbell 2007
	Cercocebus agilis	MMMF	MMMF	MMMF	Diurnal	Sex-biased	-	July 2007
	Cercocebus galeritus	MMMF	MMMF	MMMF	Diurnal	Sex-biased	-	July 2007
	Cercocebus torquatus	MMMF	MMMF	MMMF	Diurnal	Sex-biased	-	July 2007
	Cercocebus torquatus atys	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Range 2006
	Lophocebus albigena	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Olupot and Waser 2005; July 2007
	Lophocebus aterrimus	MMMF	MMMF	MMMF	Diurnal	-	-	July 2007
	Macaca arctoides	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Fooden 1990; Thierry 2007
	Macaca assamensis	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Thierry 2007
	Macaca brunneicens	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Thierry 2007
	Macaca cyclops	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Thierry 2007
	Macaca fascicularis	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Thierry 2007
	Macaca fuscata	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Thierry 2007
	Macaca hecki	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Thierry 2007
	Macaca leonina	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Thierry 2007
	Macaca maura	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Thierry 2007
	Macaca mulatta	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Thierry 2007
	Macaca nemestrina	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Thierry 2007
	Macaca nemestrina leonina	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Thierry 2007
	Macaca nemestrina nemestrina	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Thierry 2007
	Macaca nemestrina siberu	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Thierry 2007
	Macaca nigra	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Thierry 2007
	Macaca nigrescens	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Thierry 2007
	Macaca ochreata	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Thierry 2007
	Macaca pagensis	UM	UM, ,	UM	Diurnal	Sex-biased	Yes	Thierry 2007
	Macaca radiata	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Thierry 2007
	Macaca silenus	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Thierry 2007
	Macaca sinica	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Thierry 2007
	Macaca sylvanus	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Thierry 2007
	Macaca thibetana	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Thierry 2007
	Macaca tonkeana	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Thierry 2007
	Mandrillus leucophaeus	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	July 2007
	Mandrillus sphinx	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	July 2007
	Papio anubis	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Packer 1978; Sapolsky 1996
	Papio cynocephalus	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Alberts and Altmann 1995; July 2007
	Papio hamadryas	UM, MMMF	UM, MMMF	UM, MMMF	Diurnal	Bi-sexual	Yes	July 2007
	Papio papio	MMMF	MMMF	MMMF	Diurnal	Sex-biased	-	July 2007
	Papio ursinus	MMMF	MMMF	MMMF	Diurnal	Sex-biased	No	Anderson 1987; Sterck and Konjens 2000; July 2007
	Rungwecebus kipunji	MMMF	MMMF	MMMF	Diurnal	Sex-biased	-	July 2007; De Luca et al 2010
	Theropithecus gelada	UM	UM	UM	Diurnal	Sex-biased	Yes	Dunbar 1993; July 2007
	Colobus angolensis	PL, UM, MMMF	PL, UM, MMMF	PL, UM, MMMF	Diurnal	Bi-sexual	-	Fashing 2007
	Colobus guereza	PL, UM, MMMF	PL, UM, MMMF	PL, UM, MMMF	Diurnal	Sex-biased	-	Fashing 2007
	Colobus polykomos	UM, MMMF	UM, MMMF	UM, MMMF	Diurnal	Bi-sexual	No	Konjens et al 2005; Fashing 2007
	Nasalis larvatus	UM	UM	UM	Diurnal	Bi-sexual	No	Murai et al 2007
	Ptilocolobus badius	MMMF	MMMF	MMMF	Diurnal	Bi-sexual	No	Struhsaker 1975; Marsh 1979; Fashing 2007
	Prestbytis melalophos	UM, MMMF	UM, MMMF	UM, MMMF	Diurnal	Bi-sexual	No	Sterck 1998
	Pygathrix nemaeus	UM, MMMF	UM, MMMF	UM, MMMF	Diurnal	Bi-sexual	-	Kirkpatrick 2007
	Rhinopithecus avunculus	UM	UM	UM	Diurnal	Bi-sexual	-	Kirkpatrick 2007
	Rhinopithecus bieti	UM	UM	UM	Diurnal	Bi-sexual	-	Kirkpatrick 2007
	Rhinopithecus brelichi	UM	UM	UM	Diurnal	Bi-sexual	-	Kirkpatrick 2007
	Rhinopithecus roxellana	UM	UM	UM	Diurnal	Bi-sexual	No	Zhao 2008; Qi 2009; Kirkpatrick 2007
	Semnopithecus entellus	UM, MMMF	UM, MMMF	UM, MMMF	Diurnal	Bi-sexual	No	Sterck 1998
	Trachypithecus auratus	UM	UM	UM	Diurnal	Bi-sexual	-	Kirkpatrick 2007
	Trachypithecus cristatus	MMMF	MMMF	MMMF	Diurnal	Bi-sexual	No	Sterck 1998; Kirkpatrick 2007
	Trachypithecus francoisi	UM	UM	UM	Diurnal	Bi-sexual	-	Kirkpatrick 2007
	Trachypithecus johnii	UM, MMMF	UM, MMMF	UM, MMMF	Diurnal	Bi-sexual	No	Sterck 1998; Moore and Ali 1984; Kirkpatrick 2007
	Trachypithecus obscurus	MMMF	MMMF	MMMF	Diurnal	Bi-sexual	No	Sterck 1998; Kirkpatrick 2007
	Trachypithecus phayrei	UM	UM	UM	Diurnal	Bi-sexual	-	Kirkpatrick 2007
	Trachypithecus pileatus	UM	UM	UM	Diurnal	Bi-sexual	No	Sterck 1998; Kirkpatrick 2007
	Trachypithecus poliocephalus	UM	UM	UM	Diurnal	Bi-sexual	-	Kirkpatrick 2007
Hylobatidae	Bunopithecus hoolock	PL	PL	PL	Diurnal	Bi-sexual	-	Bartlett 2007
	Hylobates agilis	PL	PL	PL	Diurnal	Bi-sexual	Yes	Mitani 1990; Bartlett 2007
	Hylobates klossii	PL	PL	PL	Diurnal	Bi-sexual	Yes	Ahcan 2001; Bartlett 2007
	Hylobates lar	PL	PL	PL	Diurnal	Bi-sexual	Yes	Palombi 1994; Bartlett 2007
	Hylobates moloch	PL	PL	PL	Diurnal	Bi-sexual	Yes	Bartlett 2007
	Hylobates muelleri	PL	PL	PL	Diurnal	Bi-sexual	Yes	Bartlett 2007
	Hylobates pileatus	PL	PL	PL	Diurnal	Bi-sexual	Yes	Bartlett 2007
	Nomascus concolor	PL	PL	PL	Diurnal	Bi-sexual	-	Bartlett 2007
	Nomascus gabriellae	PL	PL	PL	Diurnal	Bi-sexual	-	Bartlett 2007
	Nomascus leucogenys	PL	PL	PL	Diurnal	Bi-sexual	-	Bartlett 2007
	Symphalangus syndactylus	PL	PL	PL	Diurnal	Bi-sexual	No	Palombi 1994; Bartlett 2007
	Gorilla gorilla gorilla	UM, MMMF	UM, MMMF	UM, MMMF	Diurnal	Bi-sexual	No	Stokes, Parnell, Olejniczak 2003; Moore 1984
	Homo sapiens	MMMF	MMMF	MMMF	Diurnal	Bi-sexual	-	-
	Pan paniscus	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Furuchi 1989
Hominidae	Pan troglodytes schweinfurthii	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Stumpf et al 2009
	Pan troglodytes troglodytes	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Williams et al 2002
	Pan troglodytes verus	MMMF	MMMF	MMMF	Diurnal	Sex-biased	Yes	Boesch and Boesch-Ackermann 2002
	Pongo abelii	S, MMMF	MMMF	S	Diurnal	Bi-sexual	-	Singleton and van Schaik 2002
	Pongo pygmaeus pygmaeus	S, MMMF	MMMF	S	Diurnal	Bi-sexual	-	Goossens et al 2006; van Schaik and van Hoof 1996

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