This is an electronic appendix to the paper by Isaac & Cowlishaw 2004 How species respond to multiple extinction threats. *Proc. R. Soc. Lond.* B **271**, 1135–1141. (DOI 10.1098/rspb.2004.2724.)

Electronic appendices are refereed with the text. However, no attempt is made to impose a uniform editorial style on the electronic appendices.

Electronic Appendix A.

- Responses to forestry;
- Responses to agriculture;
- Responses to hunting;
- Biological trait data.

Responses to Forestry

Species	Nested median response	sample size (responses)	sample size (sites)	Mean (bootstrap)	SE (bootstrap)	Sources
Alouatta belzebul	0.19	4	3	0.25	0.0034	1,2
Alouatta palliata	1.92	5	1	1.91	0.0135	3
Alouatta seniculus	1.78	2	2	1.81	0.0357	4,5
Aotus azarae	2.59	1	1	.	.	4
Ateles belzebuth	0.00	1	1	.	.	2
Ateles geoffroyi	0.14	5	1	0.14	0.0013	3
Ateles paniscus	0.42	2	2	0.42	0.0094	2,4
Cacajao calvus	1.50	1	1	.	.	5
Callicebus cupreus	4.02	1	1	.	.	4
Callicebus torquatus	1.48	1	1	.	.	4
Cebus albifrons	2.21	1	1	.	.	4
Cebus apella	1.04	6	5	1.05	0.0199	1,2
Cebus capucinus	0.35	5	1	0.35	0.0025	3
Cercocebus albigena	0.72	10	2	0.60	0.0096	6,7,8,9,10
Cercocebus torquatus	0.67	1	1	.	.	11
Cercopithecus ascanius	1.53	13	2	1.54	0.0170	6,7,8,9,12
Cercopithecus cephus	1.63	3	1	1.54	0.0179	10
Cercopithecus diana	0.67	1	1	.	.	11
Cercopithecus lhoesti	0.11	5	1	0.11	0.0027	6,7,9
Cercopithecus mitis	3.88	13	2	2.97	0.0612	6,7,8,9,12
Cercopithecus nictitans	1.32	3	1	1.10	0.0105	10
Cercopithecus petaurista	0.85	1	1	.	.	11
Cercopithecus pogonias	0.75	3	1	0.68	0.0046	10
Cheirogaleus medius	3.22	3	1	3.39	0.0637	13
Chiropotes albinasus	1.55	1	1	.	.	2
Chiropotes satanas	0.15	3	2	0.19	0.0047	1
Colobus badius	0.31	9	2	0.41	0.0056	6,7,8,9,11,14
Colobus guereza	2.63	13	2	2.25	0.0144	6,7,8,9,12
Colobus kirkii	0.19	1	1	.	.	15
Colobus polykomos	0.94	1	1	.	.	11
Colobus satanas	3.02	3	1	2.94	0.0056	10
Galagoides demidoff	0.93	1	1	.	.	16
Gorilla gorilla	1.00	6	3	1.14	0.0096	10,17,18
Hylobates agilis	0.09	2	2	0.09	0.0020	19
Hylobates lar	1.06	18	7	1.05	0.0026	20,21,22
Hylobates muelleri	0.83	8	4	0.85	0.0037	23,24,25,26
Hylobates syndactylus	0.00	1	1	.	.	19
Lagothrix lagothricha	0.22	1	1	.	.	4
Lepilemur mustelinus	1.32	3	1	1.32	0.0066	13
Macaca fascicularis	0.22	6	6	0.31	0.0185	19,20,25
Macaca nemestrina	0.75	14	9	0.73	0.0164	19,20,21,23,26,27
Macaca nigra	0.79	1	1	.	.	28
Macaca silenus	0.79	1	1	.	.	29
Mandrillus sphinx	0.60	3	1	0.54	0.0052	10
Microcebus murinus	0.11	2	1	0.11	0.0003	13
Nycticebus coucang	0.24	3	1	0.44	0.0090	27
Pan troglodytes	0.41	17	6	0.38	0.0024	6,7,10,12,17,18,30
Papio anubis	0.79	1	1	.	.	12
Perodicticus potto	0.10	1	1	.	.	16
Petterus fulvus	1.22	3	1	0.95	0.0161	13
Phaner furcifer	1.01	3	1	0.75	0.0167	13
Pithecia albicans	2.00	1	1	.	.	4
Pongo pygmaeus	0.46	10	6	0.59	0.0108	19,23,26,31,32,33
Presbytis comata	0.64	7	4	0.89	0.0188	19,23,26
Presbytis cristata	0.10	1	1	.	.	19
Presbytis melalophos	0.37	19	8	0.55	0.0033	19,20,21,22

Responses to Forestry

Species	Nested median response	sample size (responses)	sample size (sites)	Mean (bootstrap)	SE (bootstrap)	Sources
Presbytis obscura	0.23	18	7	0.70	0.0136	20,21,22
Presbytis rubicunda	0.76	8	4	0.75	0.0062	23,24,25,26
Procolobus verus	0.73	1	1	.	.	11
Propithecus verreauxi	1.52	3	1	1.10	0.0261	13
Saguinus midas	0.74	3	2	0.63	0.0093	1
Saguinus mystax	1.13	1	1	.	.	4
Saimiri ustus	0.00	1	1	.	.	2
Saimiri vanzolinii	0.50	1	1	.	.	5
Tarsius pumilus	0.41	1	1	.	.	34
Varecia variegata	0.00	1	1	.	.	35

1. Johns, A. D. (1986) (WWF-US, Washington DC).
2. Branch, L. C. (1983) *Primates* ***24,*** 424-431.
3. Sorensen, T. C. & Fedigan, L. M. (2000) *Biol. Cons.* ***92,*** 227-240.
4. Johns, A. D. (1991) in *Primate Responses to Environmental Change*, ed. Box, H. O. (Chapman & Hall, London), pp. 115-135.
5. Ayres, J. M. & Johns, A. D. (1987) *Oryx* ***21,*** 74-80.
6. Skorupa, J. P. (1986) in *Primates, the Road to Self-Sustaining Populations*, ed. Benirschke, K. (Springer-Verlag, New York), pp. 55-70.
7. Struhsaker, T. T. (1975) *The Red Colobus Monkey* (Chicago Univ. Press, Chicago).
8. Chapman, C. A., Balcomb, S. R., Gillespie, T. R., Skorupa, J. P. & Struhsaker, T. T. (2000) *Conservation Biology* ***14,*** 207-217.
9. Oates, J. F. (1977) in *Primate conservation*, eds. III, H. S. H. R. & Bournes, G. H. (Academic Press, New York), pp. 275-321.
10. White, L. J. T. (1994) *Journal of Animal Ecology* ***63,*** 499-512.
11. Martin, C. & Asibey, E. O. A. (1979) in *VIIth International Primatology Society Conference*, Bangalore).
12. Plumptre, A. J. & Reynolds, V. (1994) *Journal of Applied Ecology* ***31,*** 631-641.
13. Ganzhorn, J. U. (1995) *Ecology* ***76,*** 2084-2096.
14. Chapman, C. A. & Chapman, L. J. (1999) *Primates* ***40,*** 215-231.
15. Silkiluwasha, F. (1981) *Afr. J. Ecol.* ***19,*** 187-194.
16. Weisenseel, K., Chapman, C. A. & Chapman, L. J. (1993) *Primates* ***34,*** 445-450.
17. Tutin, C. E. G. & Fernandez, M. (1984) *American Journal of Primatology* ***6,*** 313-336.
18. White, L. J. T. & Tutin, C. E. G. (2001) in *African Rain Forest Ecology and Conservation*, eds. Weber, B., White, L. J. T., Vedder, A. & Naughton-Treves, L. (Yale University Press, New Haven).
19. Wilson, C. C. & Wilson, W. L. (1976) Yearbook of Physical Anthropology ***20,*** 207-233.
20. Marsh, C. W. & Wilson, W. L. (1981) (Universiti Kebangsaan Malaysia, Kuala Lumpur).
21. Laidlaw, R. K. (1998) in *Conservation, Management and Development of Tropical Forest Resources*, eds. See, L.S., May, D.N., Gauld, I.D. & Bishop, J. (FRI Malaysia, Kuala Lumpur).
22. Grieser Johns, A. & Grieser Johns, B. (1995) *Oryx* ***29,*** 205-211.
23. Payne, J. B. & Davies, A. G. (1982) (WWF-Malaysia, Kuala Lumpur).
24. Wilson, W. L. & Johns, A. D. (1982) *Biol. Cons.* ***24,*** 205-218.
25. Wilson, C. C. & Wilson, W. L. (1975) *Folia Primatologica* ***23,*** 245-274.
26. Johns, A. D. (1992) *Philosophical Transactions of the Royal Society of London Series B-Biological Sciences* ***335,*** 437-442.
27. Johns, A. D. (1986) *Ecology* ***67,*** 684-694.
28. Rosenbaum, B., O'Brien, T. G., Kinnaird, M. & Supriatna, J. (1998) *American Journal of Primatology* ***44,*** 89-106.
29. Menon, S. & Poirier, F. E. (1996) *International Journal of Primatology* ***17,*** 969-985.
30. Hashimoto, C. (1995) *Primates* ***36,*** 477-488.
31. Russon, A. E., Erman, A. & Dennis, R. (2001) *Biological Conservation* ***97,*** 21-28.
32. Payne, J. B. (1987) *Primate Conservation* ***8,*** 92-103.
33. Rao, M. & van Schaik, C. P. (1997) *Tropical Biodiversity* ***4,*** 173-185.
34. Merker, S. & Muehlenberg, M. (2000) *Folia Primatologica* ***71,*** 426-428.
35. White, F. J., Overdorff, D. J., Balko, E. A. & Wright, P. C. (1995) *Folia Primatologica* ***64,*** 124-131.

Responses to Agriculture

Species	Nested median response	sample size (responses)	sample size (sites)	Mean (bootstrap)	SE (bootstrap)	Sources
Alouatta belzebul	0.00	1	1	.	.	1
Alouatta seniculus	0.22	1	1	.	.	2
Aotus azarae	0.54	1	1	.	.	2
Ateles belzebuth	0.00	1	1	.	.	1
Ateles paniscus	0.00	2	2	0.00	0.0000	1,2
Callicebus cupreus	19.00	1	1	.	.	2
Callicebus torquatus	0.12	1	1	.	.	2
Cebus albifrons	0.37	1	1	.	.	2
Cebus apella	0.53	2	2	0.53	0.0010	1,2
Cercocebus albigena	0.70	1	1	.	.	3
Cercocebus torquatus	1.40	2	2	1.38	0.0158	4,5
Cercopithecus ascanius	0.93	1	1	.	.	3
Cercopithecus campbelli	2.82	1	1	.	.	5
Cercopithecus diana	0.21	2	2	0.21	0.0041	4,5
Cercopithecus erythrotis	0.45	2	1	0.45	0.0101	6
Cercopithecus mitis	1.40	1	1	.	.	3
Cercopithecus nictitans	0.26	2	1	0.25	0.0056	6
Cercopithecus petaurista	1.19	2	2	1.18	0.0114	4,5
Cercopithecus pogonias	0.42	3	2	0.47	0.0062	3,6
Chiropotes albinasus	0.00	1	1	.	.	1
Colobus angolensis	0.35	1	1	.	.	3
Colobus badius	0.19	3	3	0.04	0.0073	3,4,5
Colobus kirkii	0.86	3	1	0.64	0.0142	7
Colobus polykomos	0.31	2	2	0.32	0.0061	4,5
Gorilla gorilla	7.27	2	2	7.39	0.1470	8,9
Hylobates agilis	0.29	2	2	0.28	0.0062	10
Hylobates muelleri	0.87	1	1	.	.	11
Hylobates syndactylus	0.24	2	2	0.25	0.0056	10
Lagothrix lagothricha	0.00	1	1	.	.	2
Loris tardigradus	1.04	1	1	.	.	12
Macaca fascicularis	1.50	2	2	1.50	0.0025	10
Macaca nemestrina	0.36	2	2	0.36	0.0080	10
Macaca nigra	0.70	1	1	.	.	13
Mandrillus leucophaeus	6.67	2	1	6.66	0.0387	6
Pan troglodytes	2.75	4	3	2.79	0.0659	5,6,8
Pithecia albicans	0.10	1	1	.	.	2
Pongo pygmaeus	0.48	3	3	0.63	0.0071	10,14,15
Presbytis comata	0.00	1	1	.	.	10
Presbytis cristata	1.94	2	2	1.95	0.0225	10
Presbytis melalophos	0.37	3	3	0.38	0.0062	10
Procolobus verus	0.09	1	1	.	.	4
Saguinus mystax	0.29	1	1	.	.	2
Tarsius pumilus	1.15	1	1	.	.	16

1. Branch, L. C. (1983) *Primates* ***24,*** 424-431.
2. Johns, A. D. (1991) in *Primate Responses to Environmental Change*, ed. Box, H. O. (Chapman & Hall, London), pp. 115-135.
3. Thomas, S. C. (1991) *Biotropica* ***23,*** 68-83.
4. Martin, C. & Asibey, E. O. A. (1979) in *VIIth International Primatology Society Conference*, Bangalore).
5. Fimbel, C. (1994) *Biological Conservation* ***70,*** 277-286.
6. Gartlan, J. S. & Struhsaker, T. T. (1972) *J. Zool., Lond.* ***168,*** 221-266.
7. Silkiluwasha, F. (1981) *Afr. J. Ecol.* ***19,*** 187-194.
8. Tutin, C. E. G. & Fernandez, M. (1984) *American Journal of Primatology* ***6,*** 313-336.
9. Murnyak, D. F. (1981) *Biol. Cons.* ***21,*** 163-76.
10. Wilson, C. C. & Wilson, W. L. (1976) *Yearbook of Physical Anthropology* ***20,*** 207-233.
11. Bennett, E. L. & Dabahan, Z. (1995) in *Ecology, Conservation and Management of Southeast Asian Rainforests*, eds. Primack, R. B. & Lovejoy, T. E. (Yale Univ. Press, New Haven), pp. 66-86.
12. Singh, M., Kumar, M. A., Kumara, H. N. & Mohnot, S. M. (2000) *International Journal of Primatology* ***21,*** 721-730.
13. Rosenbaum, B., O'Brien, T. G., Kinnaird, M. & Supriatna, J. (1998) *American Journal of Primatology* ***44,*** 89-106.
14. Russon, A. E., Erman, A. & Dennis, R. (2001) *Biological Conservation* ***97,*** 21-28.
15. Rijksen, H. D. (1978) *A field study of Sumatran Orang-utans (Pongo pygmaeus abelii, Lesson 1827): Ecology, Behavour and Conservation* (H. Veenan & Zonen, BV, Wageningen).
16. Merker, S. & Muehlenberg, M. (2000) *Folia Primatologica* ***71,*** 426-428.

Responses to Hunting

Species	Nested median response	sample size (responses)	sample size (sites)	Mean (bootstrap)	SE (bootstrap)	Sources
Alouatta belzebul	0.21	3	3	0.52	0.0145	1,2
Alouatta palliata	0.6275	15	4	0.63	0.0053	2,3,4,5,6
Alouatta seniculus	0.43	10	10	0.45	0.0033	2,7,8,9
Aotus azarae	0.7	1	1	.	.	10
Aotus trivirgatus	1.07	1	1	.	.	9
Ateles belzebuth	0	1	1	.	.	9
Ateles geoffroyi	0.29	3	2	0.37	0.0103	4,5
Ateles pansicus	0.17	3	3	0.14	0.0021	6,7,8
Cacajao calvus	1.17	2	2	1.17	0.0048	6,7
Callicebus brunneus	0.17	1	1	.	.	10
Callicebus cupreus	0.845	2	2	0.85	0.0023	6,9
Callicebus torquatus	0.98	1	1	.	.	7
Cebuella pygmaea	2.03	1	1	.	.	7
Cebus albifrons	0.72	3	3	0.77	0.0053	6,7,9
Cebus apella	0.545	11	6	0.54	0.0034	6,7
Cebus capucinus	0.71	13	2	0.77	0.0063	3,4,5
Cebus olivaceus	0.74	1	1	.	.	8
Cercocebus albigena	0.69	7	3	0.54	0.0113	12,13,14
Cercocebus torquatus	1.42	1	1	.	.	15
Cercopithecus ascanius	0.29	3	1	0.49	0.0113	13
Cercopithecus campbelli	1.5	2	1	1.51	0.0146	16
Cercopithecus cephus	0.645	4	2	0.73	0.0042	12,14
Cercopithecus diana	0.84	3	2	0.78	0.0036	15,16
Cercopithecus erythrotis	0.19	5	1	0.22	0.0028	17
Cercopithecus mitis	1.47	4	2	1.83	0.0172	13,18
Cercopithecus nictitans	0.27	10	5	0.34	0.0045	12,14,17,19
Cercopithecus petaurista	1.5	2	1	1.50	0.0111	16
Cercopithecus pogonias	0.73	11	4	0.73	0.0062	12,13,14,17
Cercopithecus preussi	0.28	3	1	0.29	0.0062	17
Chiropotes satanas	0.76	1	1	.	.	1
Colobus angolensis	0.49	3	1	0.59	0.0074	13
Colobus badius	0.31	10	4	0.27	0.0114	13,15,16,17
Colobus guereza	0.295	4	2	0.29	0.0054	12,14
Colobus polykomos	0.5625	3	2	0.56	0.0012	15,16
Colobus satanas	0.15	5	1	0.14	0.0008	17
Gorilla gorilla	0.3	7	5	0.31	0.0037	12,14,20,21
Hylobates muelleri	0.19	2	2	0.19	0.0042	22
Lagothrix lagotricha	0.11	3	3	0.16	0.0037	6,7,9
Macaca nigra	0.505	2	2	0.51	0.0031	23,24
Macaca radiata	0.29	1	1	.	.	25
Macaca tonkeana	0.08	2	1	0.08	0.0004	26
Mandrillus leucophaeus	0.2875	4	1	0.27	0.0046	17
Pan troglodytes	0.465	6	4	0.44	0.0049	12,14,20
Papio cynocephalus	0.52	1	1	.	.	18
Pithecia monachus	0.835	2	2	0.83	0.0066	6,9
Pithecia pithecia	1.43	1	1	.	.	8
Presbytis entellus	0.13	1	1	.	.	25
Procolobus verus	1.93	1	1	.	.	15
Saguinus fuscicollis	2.07	1	1	.	.	7
Saguinus midas	0.915	2	2	0.92	0.0040	1,8
Saguinus oedipus	5.5	11	1	6.03	0.0306	3,4
Saimiri boliviensis	0.1	1	1	.	.	10
Saimiri oerstedii	0.515	2	1	0.51	0.0060	5
Saimiri sciureus	0	1	1	.	.	9

1. Lopes, M. A. & Ferrari, S. F. (2000) *Cons. Biol.* ***14,*** 1658-1665.
2. Peres, C. A. (1997) *Folia Primatol.* ***68,*** 199-222.
3. Wright, S. J., Zeballos, H., Dominguez, I., Gallardo, M. M., Moreno, M. C. & Ibanez, R. (2000) *Cons. Biol.* ***14,*** 227-239.
4. Glanz, W. E. (1991) in *Neotropical wildlife use and conservation*, eds. Robinson, J. G. & Redford, K. H. (Chicago Univ Press, Chicago), pp. 163-173.
5. Carillo, E., Wong, G. & Cuaron, D. (2000) *Cons. Biol.* ***14,*** 1580-1591.
6. Bodmer, R. E., Eisenberg, J. F. & Redford, K. H. (1997) *Cons. Biol.* ***11,*** 460-466.
7. Peres, C. A. (2000) in *Hunting for sustainability in tropical forests*, eds. Robinson, J. G. & Bennett, E. L. (Columbia Univ. Press, New York), pp. 31-56.
8. de Thoisy, B., Massemin, D. & Dewynter, M. (2000) *Neotropical Primates* ***8,*** 141-144.
9. Mena, P. V., Stallings, J. R., Regalado, J. B. & Cueve, R. L. (2000) in *Hunting for sustainability in tropical forests*, eds. Robinson, J. G. & Bennett, E. L. (Columbia Univ. Press, New York), pp. 57-78.
10. Emmons, L. H. (1984) *Biotropica* ***16,*** 210-222.
11. Hill, K., Padwe, J., Bejyvagi, C., Bepurangi, A., Jakugi, F., Tykuarangi, R. & Tykuarangi, T. (1997) *Cons. Biol.* ***11,*** 1339-1353.
12. Muchaal, P. K. & Ngandjui, G. (1999) *Cons. Biol.* ***16,*** 385-396.
13. Thomas, S. C. (1991) *Biotropica* ***23,*** 68-83.
14. Lahm, S. A. (1994) *Biodiversity & Conservation* ***8,*** 927-955.
15. Martin, C. (1991) *The rainforests of west Africa* (Birkhauser Verlag, Basel).
16. Davies, A. G. (1987) *Primate Conservation* ***8,*** 151-153.
17. Fa, J. (2000) in *Hunting for Sustainability in Tropical Forests*, eds. Robinson, J. & Bennett, E. (Columbia Univ. Press, New York), pp. 168-198.
18. Fitzgibbon, C. D., Mogaka, H. & Fanshawe, J. H. (1995) *Cons. Biol.* ***9,*** 1116-1126.
19. Lahm, S. A., Barnes, R. F. W., Beardsley, K. & Cervinka, P. (1998) *J. Trop. Ecol.* ***14,*** 629-643.
20. Tutin, C. E. G. & Fernandez, M. (1984) *American Journal of Primatology* ***6,*** 313-336.
21. Weber, A. W. & Vedder, A. (1983) *Biol. Cons.* ***26,*** 341-366.
22. Bennett, E. L. & Dabahan, Z. (1995) in *Ecology, Conservation and Management of Southeast Asian Rainforests*, eds. Primack, R. B. & Lovejoy, T. E. (Yale Univ. Press, New Haven), pp. 66-86.
23. Lee, R. J. (2000) in *Hunting for sustainability in tropical forests*, ed. Bennett, J. G. R. E. L. (Columbia Univ. Press, New York), pp. 455-472.
24. Rosenbaum, B., O'Brien, T. G., Kinnaird, M. & Supriatna, J. (1998) *American Journal of Primatology* ***44,*** 89-106.
25. Madhusudan, M. D. & Karanth, K. U. (2000) in *Hunting for sustainability in tropical forests*, eds. Robinson, J. G. & Bennett, E. L. (Columbia Univ. Press, New York), pp. 339-355.
26. Alvard, M. (2000) in *Hunting for sustainability in tropical forests*, eds. Robinson, J. G. & Bennett, E. L. (Columbia University Press, New York), pp. 214-230.

Biological trait data

Species	Body mass (female, kg)		Gestation period (days)		Population density (indivs/km2)		Home range (ha)		Group size		Frugivory (fruits and seeds as % total feeding time)		Terrestriality (% time at or below 5m ±2m, all behaviours)		Temperature range	Rainfall seasonality	
Alouatta belzebul	5.52	(1)	.	.	13	(2)	10	(3)	5	(4)	59	(3)	0	(5)	8.4	0.48	(6)
Alouatta palliata	5.35	(1)	186	(4)	48	(7)	35	(4)	13	(4)	13	(4)	0	(8)	10	0.49	(9)
Alouatta seniculus	5.21	(1)	191	(4)	29	(7)	16	(4)	5	(4)	42	(4)	0	(10)	8.1	0.39	(6)
Aotus azarae	1.23	(1)	127	(4)	24	(7)	3	(4)	3	(4)	70	(4)	0	(11)	12	0.43	(12)
Aotus trivirgatus	0.74	(1)	120	(4)	63	(7)	10	(4)	4	(4)	.	.	.	.	9.3	0.39	(13)
Ateles belzebuth	7.85	(1)	139	(14)	9	(7)	325	(4)	12	(4)	83	(4)	.	.	8.1	0.39	(6)
Ateles geoffroyi	7.29	(1)	229	(4)	18	(7)	86	(4)	20	(4)	78	(15)	0	(16)	10	0.49	(9)
Ateles paniscus	8.44	(1)	225	(4)	11	(7)	225	(4)	18	(4)	83	(4)	0	(10)	8.1	0.39	(6)
Cacajao calvus	2.88	(1)	.	.	.	.	550	(4)	18	(4)	85	(4)	.	.	8.1	0.39	(6)
Callicebus brunneus	0.81	(1)	.	.	.	.	4	(4)	3	(4)	47	(4)	18	(17)	12	0.43	(12)
Callicebus cupreus	1.12	(1)	130	(18)	.	.	.	.	.	.	.	.	.	.	10	0.33	(12)
Callicebus torquatus	1.21	(1)	.	.	17	(7)	12	(4)	4	(4)	67	(19)	.	.	8.8	0.29	(6)
Cebuella pygmaea	0.12	(1)	131	(4)	390	(7)	0.3	(4)	6	(4)	.	.	38	(20)	13.1	0.41	(6)
Cebus albifrons	2.29	(1)	162	(4)	10	(7)	250	(4)	20	(4)	95	(4)	6	(21)	8.8	0.29	(6)
Cebus apella	2.52	(1)	154	(4)	12	(7)	33	(4)	11	(4)	91	(4)	2	(21, 22)	11.2	0.44	(6)
Cebus capucinus	2.54	(1)	162	(4)	12	(7)	59	(4)	15	(4)	65	(4)	.	.	6.7	0.43	(9)
Cercocebus albigena	6.02	(1)	187	(4)	17	(23)	31	(4)	15	(4)	65	(24)	0	(25 , 26)	8.3	0.36	(27)
Cercocebus torquatus	5.50	(1)	168	(4)	14	(23)	247	(28)	37	(4)	86	(28)	70	(28, 29)	8.1	0.49	(27)
Cercopithecus ascanius	2.92	(1)	149	(14)	61	(23)	39	(4)	21	(4)	62	(4)	12	(26)	9.3	0.51	(27)
Cercopithecus campbelli	2.70	(1)	180	(4)	29	(23)	40	(4)	14	(4)	78	(4)	37	(30)	5.8	0.5	(27)
Cercopithecus cephus	2.88	(1)	168	(31)	17	(23)	32	(4)	20	(4)	74	(24)	10	(25)	8.8	0.38	(27)
Cercopithecus diana	3.90	(1)	.	.	41	(23)	93	(4)	28	(4)	52	(30)	6	(30)	9.2	0.38	(27)
Cercopithecus erythrotis	2.50	(32)	.	.	25	(23)	.	.	17	(4)	.	.	13	(25, 33)	7.6	0.39	(27)
Cercopithecus lhoesti	3.45	(1)	.	.	.	.	850	(4)	11	(4)	42	(34)	.	.	10.5	0.35	(27)
Cercopithecus mitis	4.25	(1)	140	(4)	127	(23)	37	(4)	39	(4)	57	(34)	5	(26)	14	0.68	(27)
Cercopithecus nictitans	4.26	(1)	168	(31)	23	(23)	56	(4)	20	(4)	70	(24)	0	(25)	8.7	0.4	(27)
Cercopithecus petaurista	2.90	(1)	.	.	43	(23)	.	.	18	(4)	77	(30)	10	(30)	5.8	0.5	(27)
Cercopithecus pogonias	2.90	(1)	165	(4)	14	(23)	78	(4)	14	(4)	78	(24)	2	(25, 26, 35)	9.7	0.38	(27)
Cercopithecus preussi	4.50	(1)	.	.	.	.	.	.	5	(4)	52	(36)	48	(25)	7.6	0.39	(27)

Biological trait data

Species	Body mass (female, kg)		Gestation period (days)		Population density (indivs/km2)		Home range (ha)		Group size		Frugivory (fruits and seeds as % total feeding time)		Terrestriality (% time at or below 5m ±2m, all behaviours)		Temperature range	Rainfall seasonality	
Cheirogaleus medius	0.23	(1)	62	(4)	173	(37)	4	(4)	3	(4)	79	(38)	42	(38)	10.8	0.73	(27)
Chiropotes albinasus	2.49	(1)	157	(4)	7	(7)	100	(4)	14	(4)	90	(4)	.	.	11.2	0.44	(6)
Chiropotes satanas	2.77	(1)	160	(4)	9	(7)	163	(4)	20	(4)	96	(39)	0	(5)	8.4	0.48	(6)
Colobus angolensis	7.57	(1)	.	.	190	(40)	31	(41)	30	(4)	50	(42)	0	(26)	12.6	0.38	(27)
Colobus badius	7.47	(1)	198	(4)	156	(23)	35	(4)	49	(4)	31	(43)	1	(26, 29, 44)	7.6	0.39	(27)
Colobus guereza	8.60	(1)	170	(14)	176	(23)	16	(4)	9	(4)	15	(43)	9	(45)	11.2	0.34	(27)
Colobus kirkii	5.46	(1)	.	.	100	(40)	35	(4)	20	(4)	6	(4)	.	.	9.5	0.49	(27)
Colobus polykomos	8.30	(1)	170	(4)	39	(23)	20	(4)	13	(4)	35	(43)	1	(29)	9.2	0.38	(27)
Colobus satanas	7.42	(1)	195	(4)	20	(23)	60	(4)	15	(4)	59	(43)	3	(25, 44)	9.8	0.44	(27)
Galagoides demidoff	0.06	(1)	113	(4)	47	(23)	1	(4)	4	(4)	19	(4)	11	(46)	8.7	0.4	(27)
Gorilla gorilla	71.50	(1)	256	(4)	0.7	(23)	1200	(4)	12	(4)	47	(24)	.	.	8	0.45	(27)
Hylobates agilis	5.82	(1)	.	.	17	(47)	27	(4)	4	(4)	58	(4)	.	.	6.7	0.32	(48)
Hylobates lar	5.34	(1)	205	(4)	6	(47)	33	(4)	5	(4)	50	(4)	.	.	8.3	0.57	(49)
Hylobates muelleri	5.35	(1)	.	.	10	(47)	38	(4)	4	(4)	62	(4)	0	(50)	10	0.28	(49)
Hylobates syndactylus	10.70	(1)	213	(4)	6	(47)	47	(4)	4	(4)	31	(4)	.	.	6.7	0.32	(48)
Lagothrix lagothricha	7.09	(1)	223	(4)	10	(7)	750	(4)	33	(4)	75	(4)	0	(22)	8.1	0.39	(6)
Lepilemur mustelinus	0.78	(1)	140	(4)	186	(37)	2	(4)	2	(4)	30	(38)	13	(38)	10.4	0.59	(27)
Loris tardigradus	0.27	(1)	168	(4)	.		1	(4)	3	(4)	0	(51)	.	.	11.7	0.51	(49)
Macaca fascicularis	3.59	(1)	165	(4)	50	(40)	113	(4)	29	(4)	87	(52)	4	(50)	7.8	0.5	(49)
Macaca nemestrina	5.70	(1)	171	(4)	15	(40)	445	(4)	28	(4)	74	(4)	72	(50)	8.9	0.46	(49)
Macaca nigra	5.47	(1)	185	(4)	.		217	(4)	47	(4)	66	(53)	.	.	7.8	0.45	(49)
Macaca radiata	3.85	(1)	162	(4)	.		120	(4)	28	(4)	50	(4)	.	.	11.7	0.57	(49)
Macaca silenus	6.10	(1)	174	(4)	.		131	(4)	17	(4)	67	(54)	2	(54)	11.7	0.51	(49)
Macaca tonkeanna	9.00	(1)	173	(55)	.	.	.	.	.	.	.	.	.	.	7.8	0.45	(49)
Mandrillus leucophaeus	12.50	(1)	174	(4)	.		4500	(4)	97	(4)	.	.	62	(25)	7.1	0.51	(27)
Mandrillus sphinx	12.90	(1)	220	(4)	7	(23)	3000	(4)	95	(4)	81	(24)	67	(56)	8	0.45	(27)
Microcebus murinus	0.09	(1)	60	(4)	42	(37)	2	(4)	3	(4)	53	(38)	89	(38)	10.8	0.73	(27)
Nycticebus coucang	0.83	(1)	191	(4)	20	(57)	.	.	.		50	(4)	.	.	8.9	0.46	(49)
Pan troglodytes	41.60	(1)	240	(4)	2	(23)	3550	(4)	37	(4)	77	(24)	18	(25)	5.8	0.43	(27)

Biological trait data

Species	Body mass (female, kg)		Gestation period (days)		Population density (indivs/km2)		Home range (ha)		Group size		Frugivory (fruits and seeds as % total feeding time)		Terrestriality (% time at or below 5m ±2m, all behaviours)		Temperature range	Rainfall seasonality	
Papio anubis	12.50	(1)	180	(4)	13	(23)	1968	(4)	50	(4)	32	(58)	.	.	13.4	0.5	(27)
Papio cynocephalus	12.30	(1)	175	(4)	6	(59)	1463	(4)	28	(4)	27	(58)	.	.	11.2	0.58	(27)
Perodicticus potto	1.03	(1)	197	(4)	5	(23)	8	(4)	2	(4)	65	(60)	85	(46)	9	0.38	(27)
Petterus fulvus	2.15	(1)	120	(4)	120	(37)	12	(4)	16	(4)	25	(61)	20	(62)	10.4	0.59	(27)
Phaner furcifer	0.46	(1)	.	.	96	(37)	4	(4)	3	(4)	17	(38)	16	(38)	8.6	0.69	(27)
Pithecia albicans	2.80	(32)	.	.	10	(22)	176	(4)	5	(4)	80	(4)	2	(22)	8.1	0.39	(6)
Pithecia monachus	2.11	(1)	.	.	22	(7)	.	.	3	(4)	93	(4)	.	.	10	0.33	(12)
Pongo pygmaeus	35.70	(1)	244	(4)	2	(40)	410	(4)	2	(4)	61	(63)	12	(50)	9.4	0.41	(49)
Presbytis comata	6.71	(1)	.	.	24	(64)	17	(4)	7	(4)	15	(4)	4	(50)	6.7	0.45	(49)
Presbytis cristata	5.76	(1)	.	.	63	(40)	13	(4)	22	(4)	32	(65)	.	.	9.4	0.42	(49)
Presbytis entellus	9.89	(1)	184	(4)	18	(64)	395	(4)	38	(4)	24	(4)	.	.	12.8	0.77	(49)
Presbytis melalophos	6.47	(1)	.	.	57	(64)	17	(4)	15	(4)	49	(4)	.	.	9.4	0.41	(49)
Presbytis obscura	6.26	(1)	150	(4)	72	(64)	33	(4)	10	(4)	35	(4)	.	.	10.2	0.44	(48)
Presbytis rubicunda	6.17	(1)	.	.	16	(64)	61	(4)	7	(4)	49	(4)	.	.	6.7	0.3	(49)
Procolobus verus	4.20	(1)	165	(4)	14	(23)	29	(4)	8	(4)	17	(4)	13	(29)	6	0.52	(27)
Propithecus verreauxi	3.62	(1)	143	(4)	46	(37)	5	(4)	7	(4)	40	(61)	6	(66)	10.8	0.73	(27)
Saguinus fuscicollis	0.36	(1)	149	(4)	27	(7)	65	(4)	6	(4)	56	(4)	35	(22)	13.1	0.41	(6)
Saguinus midas	0.58	(1)	154	(4)	10	(7)	9	(4)	5	(4)	47	(67)	3	(20)	8.4	0.48	(6)
Saguinus mystax	0.54	(1)	145	(4)	24	(7)	30	(4)	5	(4)	51	(68)	12	(22)	131	0.41	(6)
Saguinus oedipus	0.40	(1)	140	(4)	51	(7)	9	(4)	7	(4)	.	.	.	.	6.9	0.46	(9)
Saimiri boliviensis	0.71	(1)	163	(4)	46	(7)	126	(4)	11	(4)	18	(4)	.	.	12	0.43	(12)
Saimiri oerstedi	0.68	(1)	.		36	(69)	29	(4)	23	(4)	.	.	.	.	7.5	0.4	(9)
Saimiri sciureus	0.68	(1)	170	(4)	62	(7)	98	(4)	32	(4)	12	(70)	8	(10)	8.1	0.39	(6)
Saimiri ustus	0.80	(1)	.	.	.	.	.	.	.	.	.	.	.	.	13	0.49	(6)
Saimiri vanzolinii	0.65	(1)	.	.	.	.	.	.	25	(4)	.	.	.	.	10	0.33	(12)
Tarsius pumilus	0.11	(1)	.	.	.	.	0.7	(4)	.	.	0	(4)	.	.	7.2	0.64	(49)
Varecia variegata	3.52	(1)	96	(4)	42	(71)	22	(4)	11	(4)	74	(72)	0	(62)	7.5	0.5	(27)

Biological Trait data

1. Smith, R. J. & Jungers, W. L. (1997) *J. Hum. Evol.* ***32,*** 523-559.
2. Peres, C. A. (1997) *Folia Primatol.* ***68,*** 199-222.
3. Bonvicino, C. B. (1989) *Revista Nordestina de Biologia* ***6,*** 149-179.
4. Rowe, N. (1996) *The pictorial guide to living primates* (Pogonias Press, New York.).
5. Bobadilla, U. L. & Ferrari, S. F. (2000) *Am. J. Primatol.* ***50,*** 215-224.
6. Ratisbona, L. R. (1976) in *Climates of central and south America*, ed. Schwerdtfeger, W. (Elsevier, Amsterdam), pp. 219-294.
7. Robinson, J. G. & Redford, K. H. (1986) *Am. Nat* ***128,*** 665-680.
8. Mendel, F. (1976) *Folia Primatol.* ***26,*** 36-53.
9. Portig, H. (1976) in *Climates of central and south America*, ed. Schwerdtfeger, W. (Elsevier, Amsterdam), pp. 405-478.
10. Mittermeier, R. A. & van Roosmalen, M. G. M. (1981) *Folia Primatol.* ***36,*** 1-39.
11. Buchanan-Smith, H. M., Hardie, S. M., Caceres, C. & Prescott, M. J. (2000) *Int. J. Primatol.* ***21,*** 353-379.
12. Johnson, A. M. (1976) in *Climates of central and south America*, ed. Schwerdtfeger, W. (Elsevier, Amsterdam), pp. 147-218.
13. Snow, J. W. (1976) in *Climates of central and south America*, ed. Schwerdtfeger, W. (Elsevier, Amsterdam), pp. 295-404.
14. Hayssen, V., van Tienhoven, A. & van Tienhoven, A. (1993) *Asdell's patterns of mammalian reproduction* (Cornell University Press, Ithaca).
15. Chapman, C. A. (1987) *Folia Primatol.* ***29,*** 90-105.
16. Gonzalez-Kirchner, J. P. (1999) *Folia Primatol.* ***70,*** 55-60.
17. Ferrai, S. F., Iwanaga, S., M.R., M., Ramos, E. M., Ramos, P. C. S., Neto, E. H. D. & Coutinho, P. E. G. (2000) *Folia Primatol.* ***41,*** 229-234.
18. Jantschke, B., Welker, C. & Klaiber Schuh, A. (1995) *Folia Primatol.* ***65,*** 210-213.
19. Kinzey, W. G. (1992) *Am. J. Phys. Anthropol.* ***88,*** 499-514.
20. de la Torre, S., Snowdon, C. T. & Bejarano, M. (2000) *Biol. Cons.* ***94,*** 153-163.
21. van Schaik, C. P. & van Noordwijk, M. A. (1989) *Behav. Ecol. Sociobiol.* ***24,*** 265-276.
22. Peres, C. A. (1993) *J. Trop. Ecol.* ***9,*** 259-276.
23. Fa, J. E. & Purvis, A. (1997) *J. Anim. Ecol.* ***66,*** 98-112.
24. Tutin, C. E. G., Ham, R. M., White, L. J. T. & Harrison, M. J. S. (1997) *Am. J. Primatol.* ***42,*** 1-24.
25. Gartlan, J. S. & Struhsaker, T. T. (1972) *J. Zool., Lond.* ***168,*** 221-266.
26. Thomas, S. C. (1991) *Biotropica* ***23,*** 68-83.
27. Meteorological Office (1983) *Tables of temperature, relative humidity, precipitation and sunshine for the world. Vol. 3: Africa* (Her Majesty's Stationary Office, London).
28. Mitani, M. (1989) *Primates* ***30,*** 307-323.
29. McGraw, W. S. (1998) *Am. J. Phys. Anthropol.* ***105,*** 493-510.
30. McGraw, W. S. (2000) *Int. J. Primatol.* ***21,*** 157-182.
31. Butynski, T. M. e., pp. 284-322. Cambridge University Press: Cambridge. (1988) in *A primate radiation: evolutionary biology of the Africa guenons*, eds. Gautier-Hion, A., Bourliere, F., Gautier, J.-P. & Kingdon, J., Cambridge).
32. Silva, M. & Downing, J. A. (1995) *Handbook of Mammalian Body Masses* (CRC, Boca Raton).
33. Gonzalez-Kirchner, J. P. (1996) *Tropical Zoology* ***9,*** 297-304.
34. Kaplin, B. A. & Moermond, T. C. (2000) *Am. J. Primatol.* ***50,*** 227-246.
35. Gonzalez-Kirchner, J. P. (1996) *Folia Primatol.* ***45,*** 201-208.
36. Beeson, M., Tame, S., Keeming, E. & Lea, S. E. G. (1996) *J. Afr. Ecol.* ***34,*** 202-210.
37. Ganzhorn, J. U. (1992) *Oecologia* ***91,*** 540-547.
38. Hladik, C. M., Charles-Dominique, P. & Petter, J. J. (1980) in *Nocturnal Malagasy Primates: Ecology, Physiology and Behaviour*, eds. Charles-Dominique, P., Cooper, H. M., Hladik, C. M., Pages, E., Pariente, G. F., Petter-Rousseaux, A., Petter, J.-J. & Schilling, A. (Academic Press, New York).
39. Rosenberger, A. L. (1992) *Am. J. Phys. Anthopol.* ***88,*** 525-562.
40. Wolfheim, J. H. (1983) *Primates of the World: distribution, abundance and conservation* (University of Washington, Seattle).
41. Lowe, A. J. & Sturrock, G. A. (1998) *Folia Primatol.* ***69,*** 121-128.
42. Maisels, F., Gauthierhion, A. & Gautier, J. P. (1994) *International Journal of Primatology* ***15,*** 681-701.

43. Oates, J. F. (1994) in *Colobine monkeys: their ecology, behaviour and evolution*, eds. Davies, A. G. & Oates, J. F. (Cambridge University Press, Cambridge), pp. 75-128.
44. Gonzalez-Kirchner, J. P. (1997) *Folia Zoologica* ***46,*** 97-104.
45. Struhsaker, T. T. (1978) in *Recent advances in primatology, vol. 1*, eds. Chivers, D. J. & Herbert, J. (Academic Press, London), pp. 225-248.
46. Charles-Dominique, P. (1977) *Ecology and behaviour of nocturnal prosimians* (Duckworth, London).
47. Cowlishaw, G. (1992) *Behaviour* ***121,*** 131-153.
48. Nieuwolt, S. (1981) in *Climates of southern and Western Asia*, eds. Takahasi, K. & Arakawa, H. (Elsevier, Amsterdam), pp. 1-66.
49. Meteorological Office (1966) *Tables of temperature, relative humidity and precipitation for the world. Part V: Asia* (Her Majesty's Stationary Office, London).
50. Rodman, P. S. (1978) in *The ecology of arboreal folivores*, ed. Montgomery, G. (Smithsonian Institute Press, Washington), pp. 465-478.
51. Nekaris, K. A. (1999) *Am. J. Phys. Anthropol.* ***28,*** S209.
52. Wheatley, B. P., Harya Putra, D. K. & Gonder, M. K. (1996) in *Evolution and Ecology of Macaque Societies*, eds. Fa, J. E. & Lindberg, D. G. (Cambridge University Press, Cambridge), pp. 182-206.
53. O'Brien, T. G. & Kinnaird, M. (1997) *Int. J. Primatol.* ***18,*** 321-351.
54. Kurup, G. U. & Kumar, A. (1993) *Int. J. Primatol.* ***14,*** 27-40.
55. Thierry, B., Heistermann, M., Aujard, F. & Hodges, J. K. (1996) *Am. J. Primatol.* ***39,*** 47-62.
56. Hoshino, J. (1985) *Primates* ***26,*** 248-273.
57. Bearder, S. K. (1987) in *Primate Societies*, eds. Smuts, B. B., Cheney, D. L., Seyfarth, R. M., Wrangham, R. W. & Struhsaker, T. T. (Chicago University Press, Chicago), pp. 11-24.
58. Whiten, A., Byrne, R. W., Barton, R. A., Waterman, P. G. & Henzi, S. P. (1991) *Phil. Trans. R. Soc. Lond. B* ***334,*** 187-197.
59. Anderson, C. M. (1981) *Int. J. Primatol.* ***2,*** 285-310.
60. Charles-Dominique, P. & Bearder, S. K. (1979), in *The Study of Promsimian Behavior,* eds. Doyle, G.A. & Martin, R.D.
61. Clutton-Brock, T.H., Harvey, P. H. (1977) in *Primate Ecology: Studies Of Feeding And Ranging Behaviour In Lemurs, Monkeys And Apes*, ed Clutton-Brock, T.H. (Academic Press: New York), pp. 557-584.
62. Vasey, N. (2000) *Am. J. Phys. Anthopol.* ***112,*** 411-431.
63. Galdikas, B. M. F. (1988) *International Journal of Primatology* ***9,*** 1-35.
64. Davies, A. G. (1994) in *Colobine monkeys: their ecology, behaviour and evolution*, eds. Davies, A. G. & Oates, J. F. (Cambridge University Press, Cambridge), pp. 285-310.
65. Kool, K. M. (1993) *International Journal of Primatology* ***14,*** 667-700.
66. Howarth, C. J., Wilson, J. M., Adamson, A. P., Wilson, M. E. & Boase, M. J. (1986) *Folia Primatol.* ***47***.
67. Pack, K. S., Henry, O. & Sabatier, D. (1999) *Folia Primatol.* ***70,*** 1-7.
68. Garber, P. A. (1989) *American Journal of Primatology* ***19,*** 203-216.
69. Boinski, S. & Sirot, L. (1997) *Folia Primatol.* ***68,*** 181-193.
70. Robinson, J. G. & Janson, C. H. (1987) in *Primate Societies*, eds. Smuts, B. B., Cheney, D. L., Seyfarth, R. M., Wrangham, R. W. & Struhsaker, T. T. (Chicago University Press, Chicago), pp. 69-82.
71. Vasey, N. (1997) *Int. J. Primatol.* ***18,*** 207-216.
72. Rigamonti, M. M. (1993) in *Lemur social systems and their ecological basis*, eds. Kappeler, P. M. & Ganzhorn, J. U. (Plenum Press, New York), pp. 25-40.