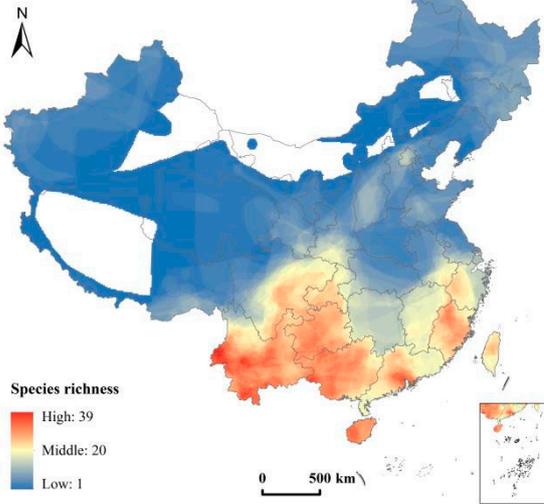


Table S1. Environmental factors grading standards. The abbreviations of environmental factors are explained in methods section.

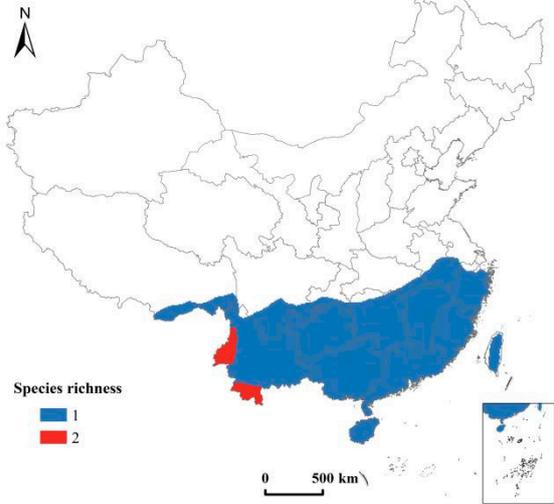
Categories	MTCM(°C)	MTWM(°C)	AMT(°C)	AP(mm)	NDVI	AET(mm)	Ele(m)	AR(m)	ST	GT	LT
1	-41.84~-32.15	-34.47~-19.19	-12.93~-4.02	0.00~146.93	0.00~0.09	0.00~65.75	-157.51~293.17	0.00~233.00	alfisols	plains	paddy field
2	-32.15~-26.57	-19.19~-15.04	-4.02~-1.02	146.93~305.96	0.10~0.17	65.75~179.49	293.18~683.77	233.01~446.00	semi-leached soil	platforms	dry field
3	-26.57~-22.30	-15.04~-11.41	-1.02~1.72	305.96~480.55	0.18~0.27	179.49~289.87	683.78~1072.55	446.01~679.00	pedocals	hills	forest land
4	-22.30~-18.73	-11.41~-7.78	1.72~4.43	480.55~664.61	0.28~0.38	289.87~393.27	1072.56~1443.48	679.01~935.00	aridisols	small undulating mountains	grassland
5	-18.73~-14.94	-7.78~-4.23	4.43~7.24	664.61~897.83	0.39~0.50	393.27~489.53	1443.49~1905.59	935.01~1226.00	desert soil	intermediate undulating mountains	water area
6	-14.94~-9.76	-4.23~-0.58	7.24~10.41	897.83~1146.46	0.51~0.61	489.53~589.03	1905.60~2562.62	1226.01~1582.00	primary soil	large undulating mountains	town, industrial and mining, residential lands
7	-9.76~-3.70	-0.58~3.59	10.41~13.87	1146.46~1408.83	0.62~0.70	589.03~694.49	2562.63~3366.72	1582.01~2029.00	semi-hydromorphic soil	maximum undulating mountains	unused land

8	-3.70~1.38	3.59~8.17	13.87~17.0 5	1408.83~1729. 91	0.71~0.7 8	694.49~830.08	3366.73~4160. 75	2029.01~2613. 00	hydromorphic soil	others	others
9	1.38~6.39	8.17~13.28	17.05~20.2 8	1729.91~2087. 91	0.79~0.8 5	830.08~1032.5 9	4160.76~4834. 83	2613.01~3816. 00	saline-alkali soil		
10	6.39~17.64	13.28~23.6 5	20.28~28.2 3	2087.91~2618. 30	0.86~0.9 2	1032.59~1481. 88	4834.84~6464. 80	3816.01~6885. 00	anthrosols		
11									high-mountain soil		
12									ferralsols		
13									others		

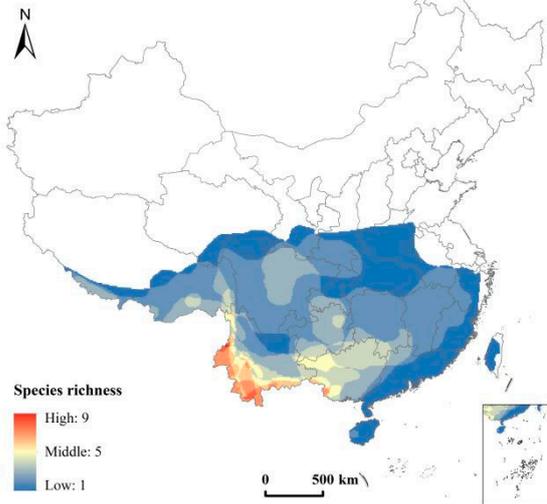
(a) Chiroptera



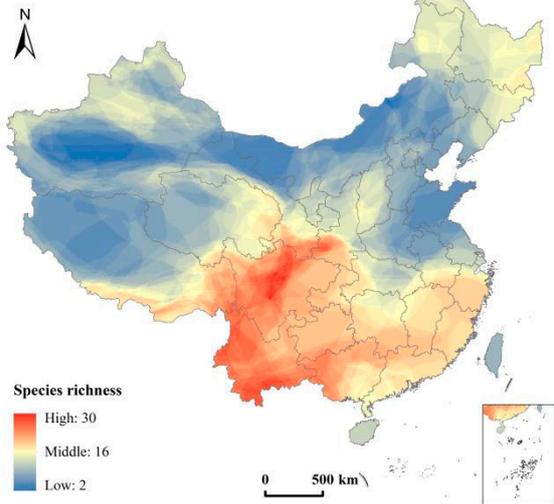
(b) Pholidota



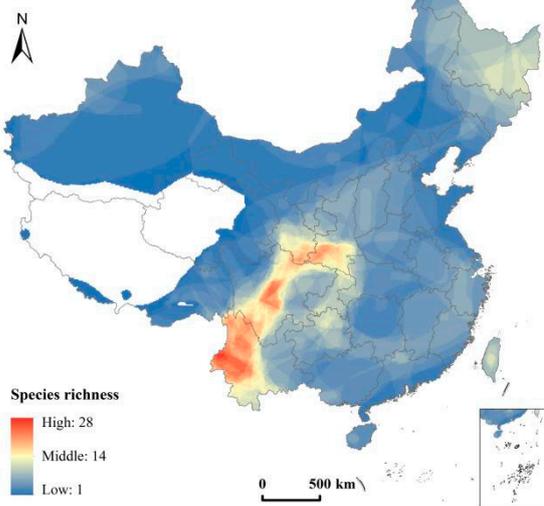
(c) Primates



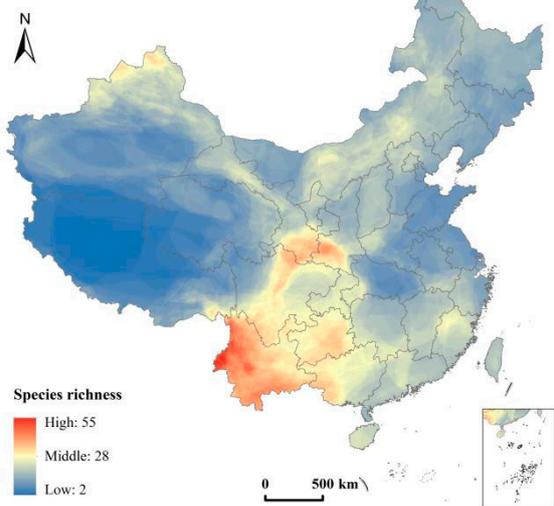
(d) Carnivora



(e) Eulipotyphla



(f) Rodentia



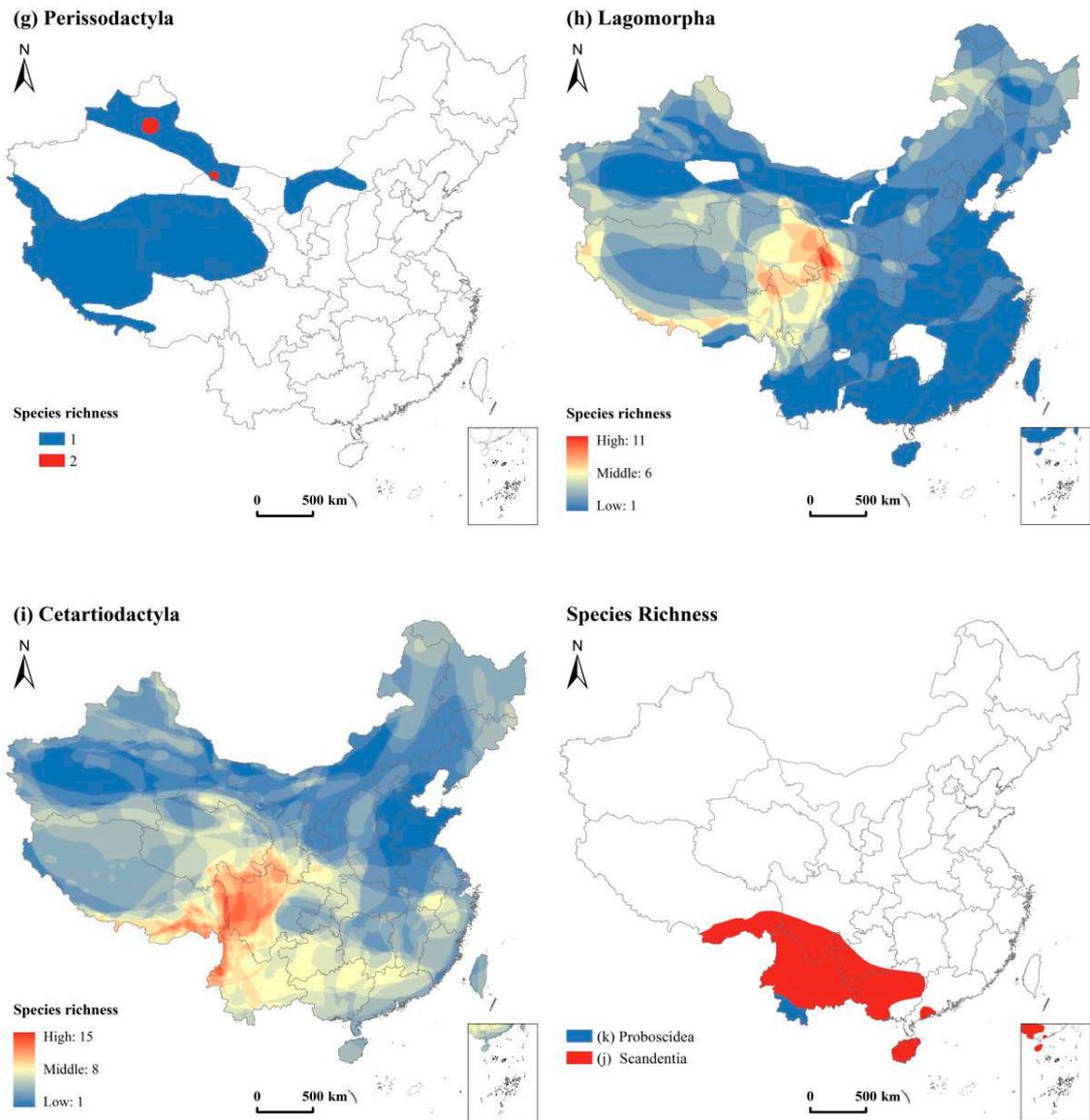


Figure S1. Spatial distribution of different terrestrial mammalian orders