

## Supplementary Materials

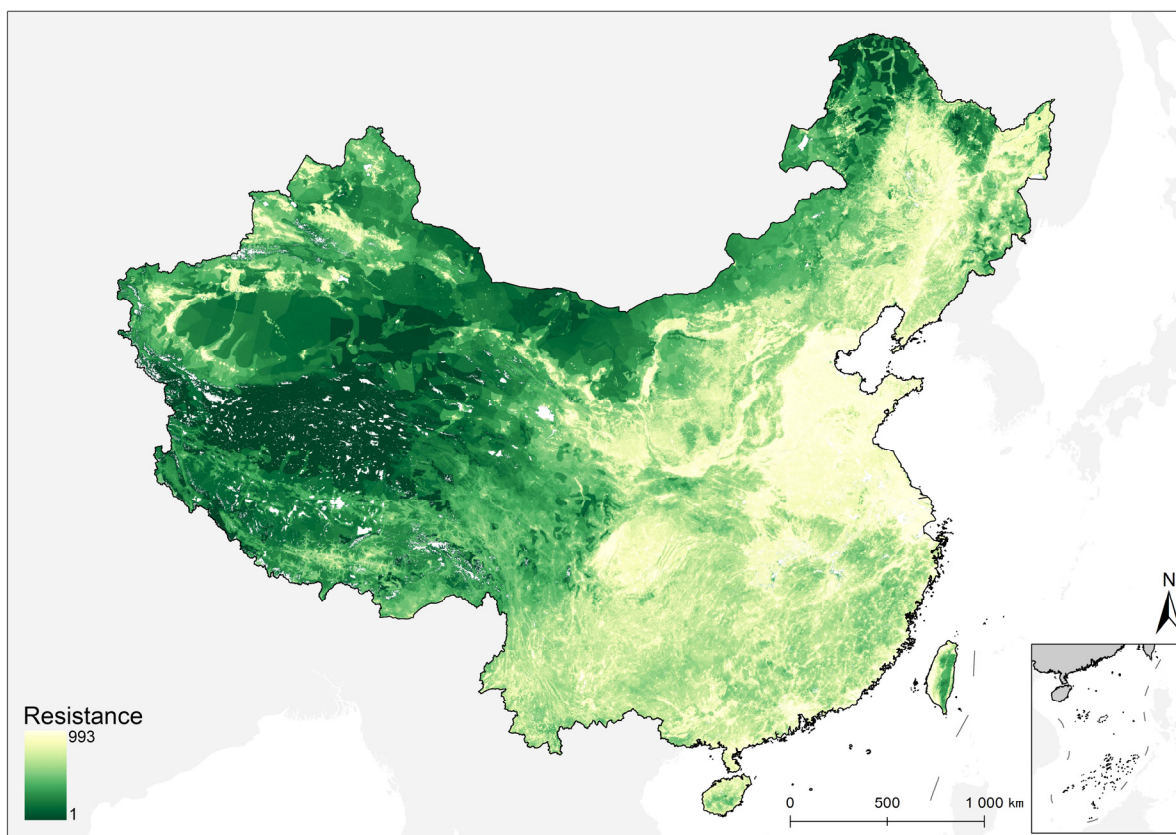


Figure S1. Resistance Surface of China.

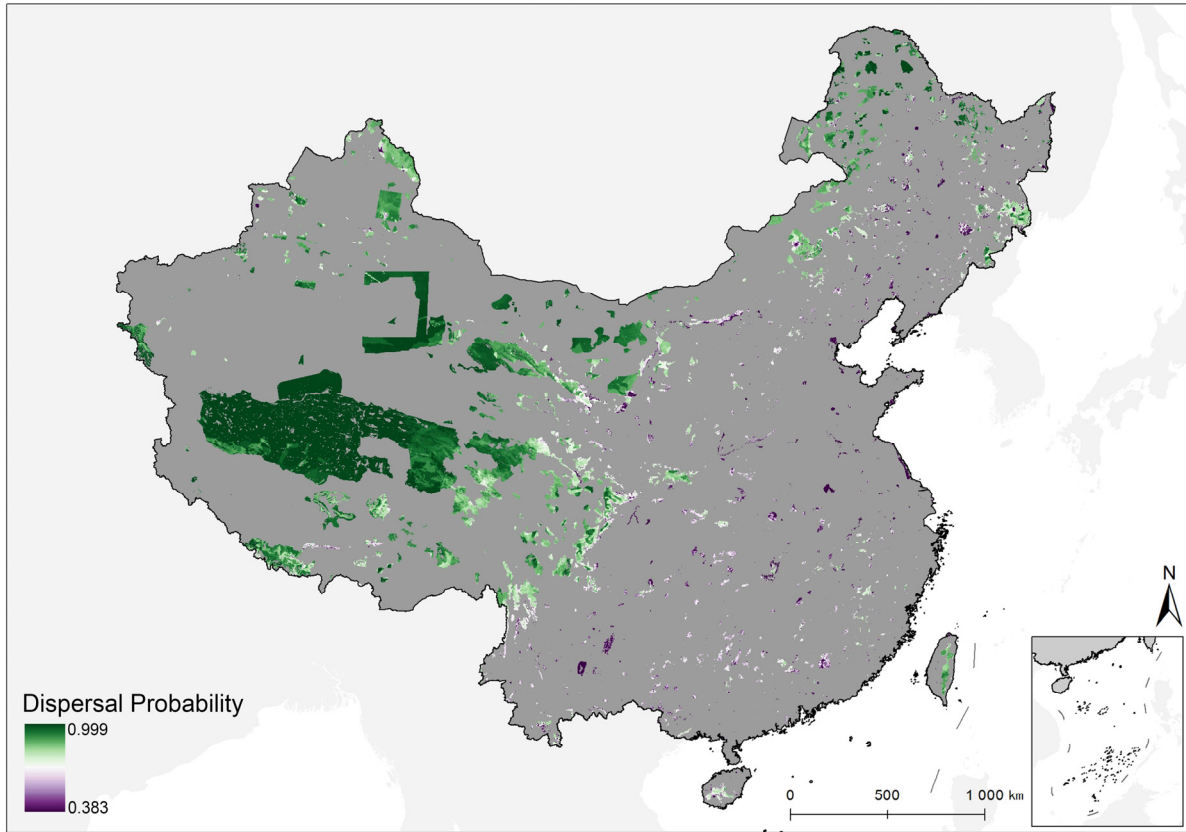


Figure S2. Dispersal Probability Surface of PAs in China.

Table S1. Connectivity indicators of ecoregions' PA network in China under the assumption that the intra-patch connectivity of PA patches is very good, that is, the PC<sub>intra</sub> index of all the PA patches is 1.

No.	Ecoregion	PC <sub>net</sub> of PAs	PC <sub>land</sub> of PAs
I1	Northern Daxing'anling cold-temperate semi-humid zone	75.30%	11.41%
I2	Southern Daxing'anling temperate semi-humid zone	28.25%	4.05%
I3	Xiaoxing'anling temperate semi-humid zone	71.07%	12.05%
I4	Northeast Plain temperate semi-humid zone	10.35%	0.52%
I5	Changbai Mountain temperate humid semi-humid zone	21.21%	3.21%
I6	Liaodong Peninsula warm-temperate semi-humid zone	8.94%	0.45%
II1	Yanshan Mountain warm-temperate semi-humid zone	10.33%	0.48%
II2	Haihe Plain warm-temperate semi-humid zone	22.36%	0.57%
II3	Shanxi Plateau warm-temperate semi-humid zone	10.74%	0.31%
II4	Northern Shaanxi and Longzhong Plateau warm-temperate semi-arid zone	18.35%	0.52%
II5	Southern Taihang and northern Qinling warm-temperate semi-humid zone	18.71%	0.77%
II6	Yellow and Huai River Plain warm-temperate semi-humid zone	19.44%	0.54%

II7	Shandong Peninsula warm-temperate semi-humid zone	14.58%	0.25%
III1	Middle and lower reaches of Yangtze River northern subtropical humid zone	13.49%	0.58%
III2	Middle and lower reaches of Yangtze River central subtropical humid zone	6.00%	0.27%
III3	Southeast China humid south subtropical zone	6.74%	0.26%
III4	Taiwan Island tropical subtropical humid zone	89.71%	17.63%
III5	Southeast China tropical humid zone	44.54%	1.19%
III6	Hainan Island tropical humid zone	86.93%	14.45%
IV1	Qinba Mountains northern subtropical humid zone	31.65%	4.56%
IV2	Sichuan basin and marginal mountains subtropical humid zone	56.66%	6.66%
IV3	Guizhou plateau and marginal mountains subtropical humid zone	9.34%	0.34%
IV4	Northern Transverse Mountains subtropical humid semi-humid zone	24.53%	3.81%
IV5	Southern Transverse Mountains central subtropical humid zone	20.78%	2.16%
IV6	Southwest China tropical subtropical humid zone	8.06%	0.48%
IV7	Eastern edge of the Himalayas tropical humid zone	85.42%	7.10%
V1	Xiliaohe River temperate semi-arid zone	22.65%	1.97%
V2	Eastern Inner Mongolia Plateau temperate semi-arid zone	20.10%	3.19%
V3	Ordos Plateau and surrounding mountains temperate semi-arid zone	32.60%	3.60%
VI1	Western Inner Mongolia Plateau temperate arid Zone	41.65%	5.88%
VI2	Northern Xinjiang temperate arid semi-arid zone	32.22%	4.20%
VI3	Southern Xinjiang temperate warm temperate arid zone	53.46%	4.21%
VII1	Kunlun Mountains alpine arid zone	87.63%	39.79%
VII2	Qaidam and Qilian Mountains alpine arid semi-arid zone	78.98%	18.54%
VII3	Qiangtang Plateau alpine arid zone	92.87%	41.07%
VII4	East Tibet and south Qinghai alpine semi-humid zone	86.54%	29.66%
VII5	Southern Tibetan alpine semi-humid semi-arid zone	60.71%	9.96%
VIII1	South China Sea islands tropical humid zone	—	—