

## Supplement

**Table S1.** Landscape index of light pollution area on the TP from 1992 to 2018.

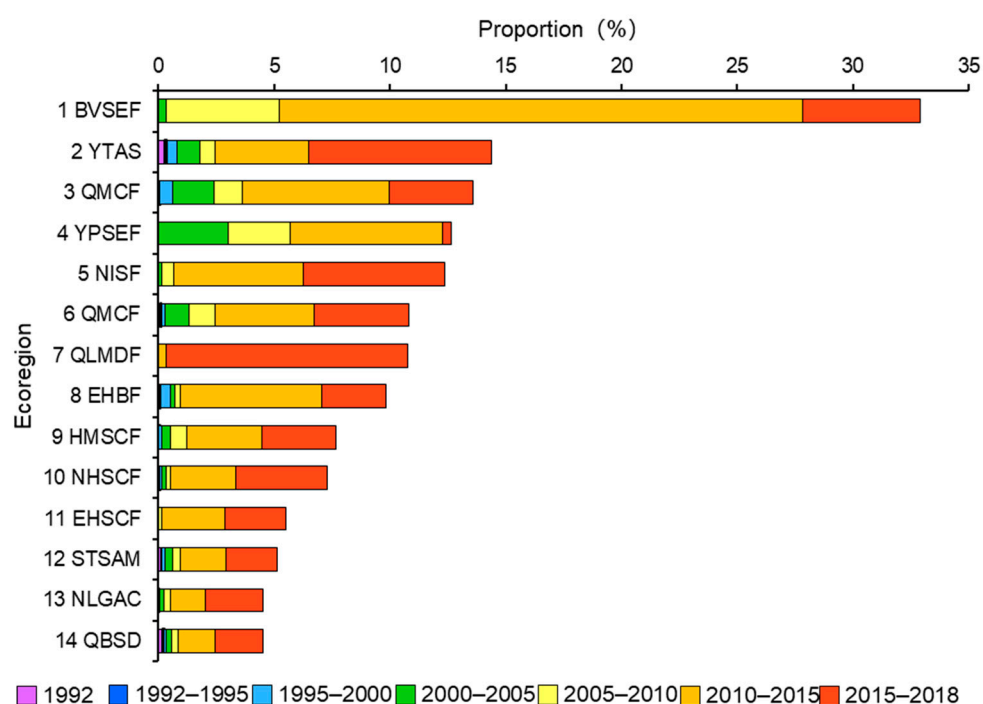
Year	TA (10 <sup>-3</sup> )	PD (10 <sup>-3</sup> )	LPI	LSI	AI
1992	1.16	0.0156	0.0918	6.62	82.79
1995	1.68	0.0206	0.1218	7.39	83.86
2000	3.75	0.0412	0.2479	11.02	83.27
2005	8.89	0.0805	0.6673	15.84	84.06
2010	13.54	0.1160	0.8860	19.14	84.26
2015	45.23	0.2455	1.9693	28.96	86.77
2018	82.82	0.3840	4.0623	36.50	87.61

**Table S2.** Threatened species whose habitats are affected by light pollution by more than 25% (inclusive).

Species	Scientific Name	Category	Species Habitat Area (km <sup>2</sup> )	Light Pollution Area in 1992 (km <sup>2</sup> )	The Proportion of Light Pollution Area in 1992 (%)	Light Pollution Area in 2018 (km <sup>2</sup> )	The Proportion of Light Pollution Area in 2018 (%)
Mammals	Shaggy	EN	34.79	0	0	33.14	95.26
	river otter	VU	187.21	0	0	107.63	57.49
	Asian elephant	EN	5705.71	0	0	1672.43	29.31
Birds	Dauphin	VU	1608.17	0	0	808.49	50.27
	Assam's quail	EN	3554.46	0	0	1432.01	40.29
	Swamp cuckoo	VU	1327.25	0	0	451.65	34.03
	Great bald Stork	EN	4324.81	0	0	1407.04	32.53
	Bawd	CR	2845.05	0	0	870.95	30.61
	Wrinkled hornbill	VU	9144.81	0	0	2639.48	28.86
	Swamp partridge	VU	6693.07	0	0	1740.80	26.01
	Red-necked crane	VU	9028.47	0	0	2313.25	25.62
	Spotted eagle	VU	42.25	0	0	10.66	25.24
	Geoclemys hamiltonii	EN	2427.42	0	0	754.60	31.09

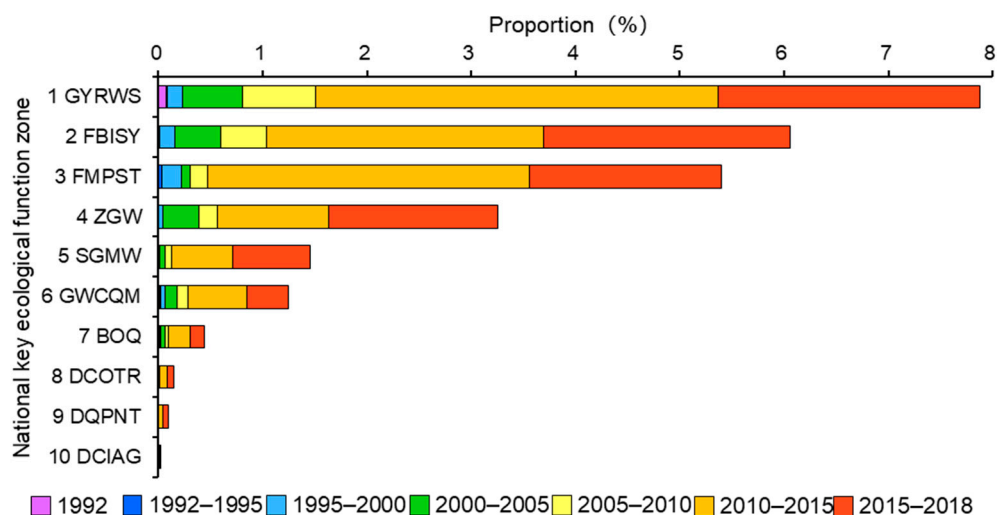
**Table S3.** Near threatened species whose habitats are affected by light pollution by more than 25% (inclusive).

Species	Scientific Name	Category	Species Habitat Area (km <sup>2</sup> )	Light Pollution Area in 1992 (km <sup>2</sup> )	The Proportion of Light Pollution Area in 1992 (%)	Light Pollution Area in 2018 (km <sup>2</sup> )	The Proportion of Light Pollution Area in 2018 (%)
Birds	White crested ibis	NT	5.04	0	0	4.01	79.63
	Big grass warbler	NT	1935.68	0	0	980.47	50.65
	Dariae	NT	4757.22	0	0	1738.12	36.54
	Black-belly snake	NT	3257.22			1094.21	33.59
	Black-necked stork	NT	6187.51	0	0	1905.53	30.80



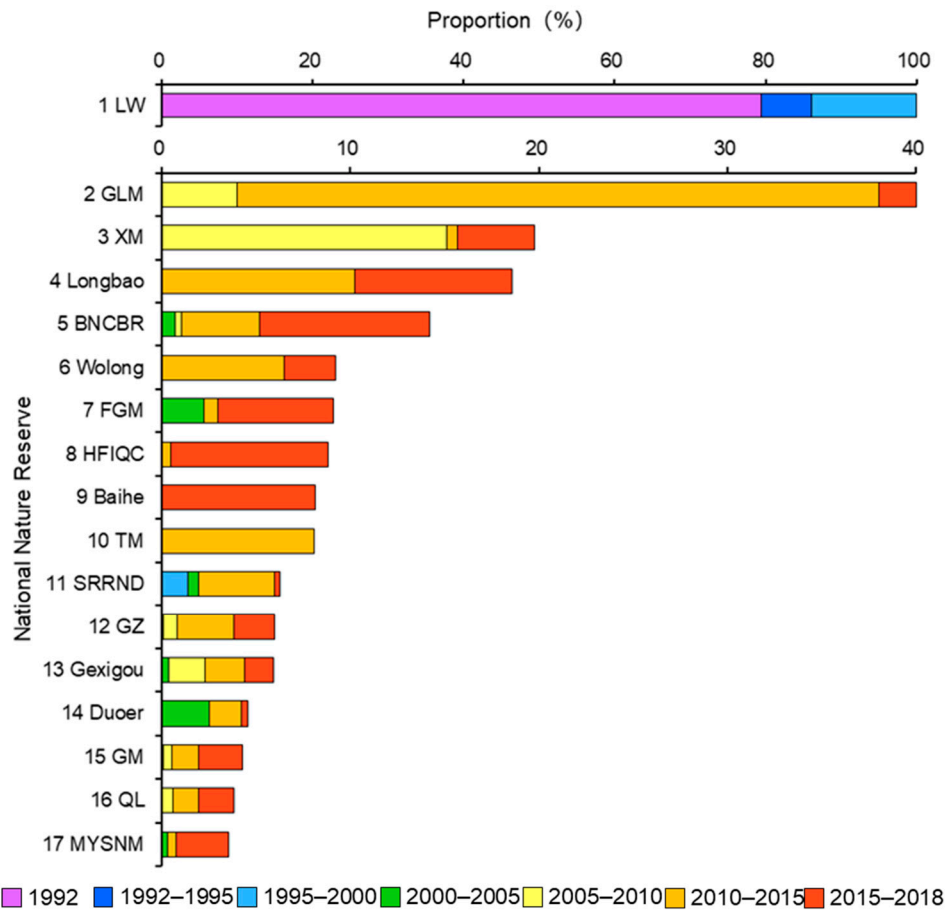
NO.	Abbreviation	Ecoregion
1	BVSEF	Brahmaputra Valley semievergreen forests
2	YTAS	Yarlung Tsangpo arid steppe
3	QMCF	Qionglai-Minshan conifer forests
4	YPSEF	Yunnan Plateau subtropical evergreen forests
5	NISF	Northern Indochina subtropical forests
6	QMCF	Qilian Mountains conifer forests
7	QLMDF	Qin Ling Mountains deciduous forests
8	EHBf	Eastern Himalayan broadleaf forests
9	HMSCF	Hengduan Mountains subalpine conifer forests
10	NHSCF	Northeastern Himalayan subalpine conifer forests
11	EHSCF	Eastern Himalayan subalpine conifer forests
12	STSAM	Southeast Tibet shrublands and meadows
13	NLGAC	Nujiang Langcang Gorge alpine conifer and mixed forests
14	QBSD	Qaidam Basin semidesert

**Figure S1.** Light pollution at the ecoregional scale. Only the ecoregions whose total light pollution range is above the average level of light pollution on the TP are listed. The abbreviations of the 14 ecoregions are shown in the table below.



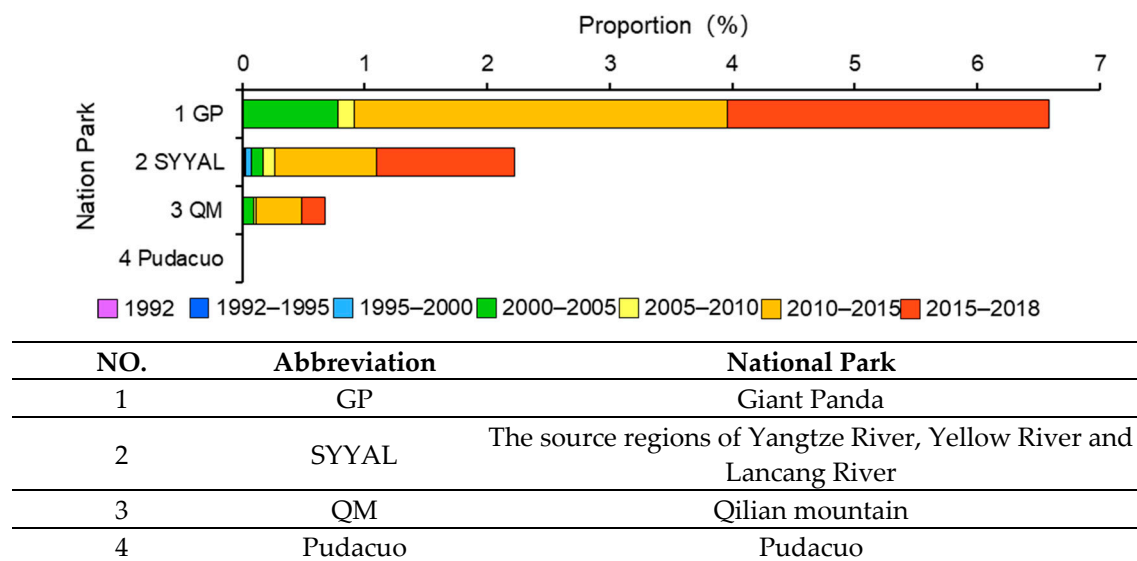
NO.	Abbreviation	National Key Ecological Function Area
1	GYRWS	Gannan Yellow River water supply
2	FBISY	Forest and biodiversity in Sichuan and Yunnan
3	FMPST	Forest at the margin of the plateau in southeast Tibet
4	ZGW	Zoige Grassland Wetland
5	SGMW	Sanjiangyuan Grassland Meadow Wetland
6	GWCQM	Glaciers and water conservation in the Qilian Mountain
7	BOQ	Biodiversity of Qinba
8	DCOTR	Desertification control of Tarim River
9	DQPNT	Desert of Qiangtang Plateau in Northwest Tibet
10	DCIAG	Desertification control in Altun Grassland

**Figure S2.** Light pollution at the scale of national key ecological function zone. The abbreviations of the national key ecological function zones are shown in the table below.



NO.	Abbreviation	National Natural Reserve
1	LW	Lalu Wetland
2	GLM	Gansu Lianhua Mountain
3	XM	Xunhua Mengda
4	Longbao	Longbao
5	BNCBR	Black-necked crane of Brahmaputra River
6	Wolong	Wolong
7	FGM	Four Girls Mountain
8	HFIQC	Haloxylon forest in Qinghai-chaidam
9	Baihe	Baihe
10	TM	Taizi mountains
11	SRRND	The source region of rivers in the north of Datong
12	GZ	Gahai-zecha
13	Gexigou	Gexigou
14	Duoer	Duoer
15	GM	Gongga Mountain
16	QL	Qinghai Lake
17	MYSNM	Mangkang Yunnan snub-nosed monkey

**Figure S3.** Light pollution at the scale of national nature reserve. The abbreviations of the national nature reserves are shown in the table below.



**Figure S4.** Light pollution at the national park scale. The abbreviations of the national parks are shown in the table below.