

Table S3. Last-occurrence records for gibbons across different administrative regions in China.

Province	Administrative region	N or S of Yangtze	Last record	Randomised date	Ref.	Description and notes
Anhui	Anqing	N	1721		1	"yuan (like monkey but bigger, with long arms)"
Anhui	Chizhou	S	1883		1	"yuan, hou" found at Gongchi
Anhui	Chuzhou	N	762		2	at Taiping
Anhui	Hefei (incl. Chaohu)	N	1885		1	"changbiyuan"
Anhui	Huangshan	S	1908		1	"yuan, hou"; gibbons also specifically referred to in 1815 record; also several other local records, but mostly inaccurate/mythological
Anhui	Lu'an	N	1905		1	"yuan, hou"; gibbons also specifically referred to in 1803 and 1885 records
Anhui	Ma'anshan	N	1757		1	"good at singing, best at moving"
Anhui	Wuhu	S	1815		1	"gibbons" in Nanling
Anhui	Xuancheng	S	1699		1	"changbiyuan" in Jixi; more recent record from 1815 provides only poetic description of gibbons, so may represent vague memory of past gibbon occurrence rather than contemporary survival
Chongqing	Chengkou	N	1844		1	"yuan (loudly calling/shouting yellow monkey, long arms, good at singing, good at climbing), monkeys, smaller type of monkeys"
Chongqing	Fengjie	S	762		2	at Kuizhou
Chongqing	Fuling	S	250		2	
Chongqing	Jiangbei	N	1844		1	"yuan at Tonglingjing (has golden hair, long arms, and long fur)" - not very detailed description but does mention long arms so potentially accurate
Chongqing	Nanchuan	S	1931		1	"yuan" (classified in the monkey group ... like a monkey but bigger, long arms, good at channelling qi energy, lives for a very long time ... arm bones can be used to make flutes ... different coloured types (clear-coloured, white, black, yellow, red) ... calm/peaceful nature ... sings a call composed of three notes); also similar description from 1926
Chongqing	Shizhu Tujia	S	11th century	1015	2	at Wanshou Mountain
Chongqing	Wushan	N	1893		1	"hou, yuan"; yuan described with reference to classical poetry and with description

						of yellow and black types, like monkey but larger, long arms
Fujian	Fuzhou	S	1922		1	"yuan - like monkey but with long arms and a clear call", found in Yongtai County
Fujian	Longyan	S	1941		1	"hou, yuan (like monkey, long arms, good at singing)"
Fujian	Nanping	S	1936		1	"yuan - like monkey but with long arms and a clear call, and good at climbing", found at Shunchang; several other early 20th century and many older records
Fujian	Ningde	S	1880		1	"hou, yuan, xingxing"
Fujian	Putian	S	1873		1	"yuan (distinct from monkey, has long arms, good at singing)"; 1945 record reports "two types of hou (small one (yuan), and large one (xingxing) which is rarely seen), so gibbons probably already locally extinct by this date
Fujian	Quanzhou	S	1787		1	"yuan, hou"; 1927 record states that "yuan" are seldom seen, so possibly already locally extinct by this date
Fujian	Sanming	S	1947		1	
Fujian	Zhangzhou	S	1942		1	
Gansu	Pingliang	N	1796		1	"yuan, hou" found at Huating
Guangdong	Chaozhou	S	1933		1	"hou, yuan"
Guangdong	Dongguan	S	1921		1	"yuan, hou"; records from 1879 and 1911 explicitly mention "changbiyuan"
Guangdong	Foshan	S	1833		1	"changbiyuan"
Guangdong	Guangzhou	S	1921		1	"hou, yuan"; similar records from 1890 and 1911, naming monkeys and apes separately and providing description of gibbon ("long arms, and with yellow, black and white types")
Guangdong	Heyuan	S	1877		1	"changbiyuan"
Guangdong	Huizhou	S	1877		1	"yuan, hou"
Guangdong	Jiangmen	S	1893		1	"hou, yuan"; record from 1941 states that gibbon and other species are now regionally extinct
Guangdong	Jieyang	S	1933		1	"changbiyuan"
Guangdong	Maoming	S	1890		1	"ape, stone monkey ["shihou" - possibly karst-dwelling langur?], monkey"; amongst descriptions of primates in this account, mentions an animal that can sing well and specifically states that females are yellow and males are black; however, another 1890 report from the same region states that both monkeys and apes are no longer regionally present; previous verifiable report is from 1888, which mentions "yuan, hou" and singing ability of the ape; record from 1946 does not list apes

Guangdong	Meizhou	S	1933		1	"changbiyuan"; other record of "changbiyuan" from 1893; record from 1943 only records monkeys
Guangdong	Qingyuan	S	1938		1	"yuan, hou: monkey has noisy temperament, ape has calm temperament and long arms"; other good description from 1937 (describing sorrowful quality of calls); additional record from 1915 ("yuan, hou")
Guangdong	Shantou	S	1933		1	"changbiyuan"
Guangdong	Shanwei	S	1877		1	"changbiyuan"
Guangdong	Shaoguan	S	1926		1	"yuan, hou"; record from 1839 provides accurate description of gibbon ("like monkey but larger, long arms", etc)
Guangdong	Shenzhen	S	1304		1	"changbiyuan"
Guangdong	Yangjiang	S	1941		1	"yuan, macaque", with lengthy description of gibbon; record from 1925 reports "yuan, hou" with gibbon description
Guangdong	Yunfu	S	1896		1	"ape (has yellow, black and white types [male and female?])"
Guangdong	Zhanjiang	S	1672		1	"ape (long arms, yellow fur, two types [male and female?])"
Guangdong	Zhaoqing	S	1916		1	"monkey, white ape, black ape [male and female?]; record from 1873 explicitly names "changbiyuan"
Guangdong	Zhongshan	S	1304		1	"changbiyuan"
Guangdong	Zhuhai	S	1304		1	"changbiyuan"
Guangxi	Baise	S	extant		6	
Guangxi	Beihai	S	1721		1	"has yuan, has hou"
Guangxi	Chongzuo	S	1950s	1958	3	
Guangxi	Fangchenggang	S	1637		1	"changbiyuan"
Guangxi	Guigang	S	1920		1	"hou, yuan" (together with description of the respective characters of these two primates - not biologically very useful, but emphasis on honest/merciful characters of gibbon in contrast to greedy/nasty character of monkey)
Guangxi	Guilin	S	1884		1	"yuan, hou"
Guangxi	Hechi	S	1937		1	"yuan, hou"
Guangxi	Hezhou	S	1932		1	"yuan" - mentions apes in a long list of animal types
Guangxi	Liuzhou	S	805-819	818	2	
Guangxi	Nanning	S	1948		1	"yuan, hou"; record from 1937 reports "black apes, macaques", with description of gibbon (long arms, etc)

Guangxi	Qinzhou	S	1733		1	"yuan, hou"
Guangxi	Wuzhou	S	1908		1	"xingxing, yuanhou / yuan, hou"
Guangxi	Yulin	S	1924		1	"hou, yuan" (together with description of the respective characters of these two primates, similar to description associated with 1924 date at Guigang)
Guizhou	Bijiecheng	S	1522-1566	1545	1	"changbiyuan"
Guizhou	Guiyang	S	1741		2	
Guizhou	Liupanshui	S	1889		1	"has hou, has yuan"
Guizhou	Qiandongnan	S	1522-1566	1541	1	"changbiyuan"
Guizhou	Qiannan	S	1913		1	"yuan, hou"
Guizhou	Qianxinan	S	1522-1566	1550	1	"changbiyuan"
Guizhou	Tongrencheng	S	1522-1566	1532	1	"yuan, hou"
Guizhou	Zunyi	S	1936		1	simply records that apes are found in the eastern edge of the county, but 1929 report provides more detailed description that identifies the animals as gibbons (like monkey but larger, black in colour)
Hainan	Baisha	S	extant		6	
Hainan	Baoting	S	1983		4	
Hainan	Changjiang	S	extant		6	
Hainan	Chengmai	S	1964		4	
Hainan	Danzhou	S	1950		4	
Hainan	Dingan	S	1878		1	"yuan, hou" (three types of ape - golden-furred, clear faced, and black - clear-faced is smaller)
Hainan	Dongfang	S	1978		4	
Hainan	Haikou (=Qiongshan)	S	1917		1	"yuan", with detailed description that matches gibbon (like monkey but bigger, long arms, etc)
Hainan	Ledong	S	1983		4	
Hainan	Lingao	S	1892		1	"yuan, hou"
Hainan	Lingshui	S	1983		4	
Hainan	Qionghai	S	1964		4	
Hainan	Qiongzong	S	1995		4	
Hainan	Sanya	S	1964		4	
Hainan	Tunchang	S	1964		4	

Hainan	Wanning	S	1983		4	
Hainan	Wenchang	S	1920		1	refers to "monkeys", but apparently using this word in equivalent sense to "primate", as also talks about long arms, black fur, etc.
Hainan	Wuzhishan	S	1983		4	
Henan	Xinyang	N	1887		1	Huangchuan County has "yuan: ... like monkey but bigger, extremely long arms that can channel qi energy, clear [qing], white, dark, yellow and red types, quiet and still nature, eats fruit..."; 1936 record reports that the region used to have numerous species, including "every type of yuan", but these have all now vanished
Henan	Zhengzhou	N	762		2	at Huangchuan
Henan	Zhumadian	N	416		2	at Dengfeng, Songshan
Hubei	Enshi Tujia and Miao Autonomous Prefecture	S	1880		1	"yuan, hou"; one 1866 record reports that monkeys are commonly called macaque, but the large ones are called yuan, whereas another 1866 record reports that "yuanhou" is "now rare", and an 1841 record lists them as dangerous to people (along with muntjacs etc), again suggesting that knowledge about them is being lost; Van Gulik [ref. 2] also contains good description of gibbons from 1827
Hubei	Huanggang	N	1488-1505	1490	1	"yuan, hou"
Hubei	Shiyan	N	1870		1	"yuan, hou"; other similar records from 1685, 1785, 1865 (twice) and 1867
Hubei	Wuhan	N	1488-1505	1491	1	"yuan, hou"
Hubei	Xiaogan	N	762		2	at Anlu
Hubei	Yichang	N	1866		1	"yuan" and "solitary-ape" (duyuan); similar record from 1864, and also from 1763 and from Ming Dynasty (1488-1505, 1522-1566)
Hunan	Changde	S	1892		1	"like macaque but bigger and with more quiet character ... has long arms, good at singing and climbing, etc ... also explicitly contrasts between quiet characters of gibbon and noisy character of monkey"
Hunan	Changsha	S	1747		1	"hou, yuan"
Hunan	Chenzhou	S	1883		1	"hou, yuan"; numerous 19th century records (1802, 1815, 1817, 1859, 1866, 1867) also report "hou, yuan"; record from 1763 explicit reports "changbiyuan"
Hunan	Hengyang	S	1875		1	"yuan"
Hunan	Huaihua	S	1902		1	"hou, yuan"
Hunan	Loudi	S	1832		1	"monkey and two types of ape"; later record from 1872 only mentions monkeys
Hunan	Xiangtan	S	1756		1	"hou, yuan"; record from 1747 explicitly names "changbiyuan"

Hunan	Xiangxi	S	1930		1	"hou, yuan"; 1871 record provides description of gibbon ("long arms, good at singing")
Hunan	Yongzhou	S	1901		1	"hou, yuan"; similar record from 1870; later record from 1931 only reports one type of primate called "yuan", unlike earlier reports that name both "yuan" and "hou", and so may be name transference from gibbon to monkey
Hunan	Yueyang	S	1874		1	"yuan, hou"; later record from 1880 contains a few gibbon "facts" but is mostly nonsense; record from 1747 explicitly names "changbiyuan"
Hunan	Zhangjiajie	S	1869		1	"like monkey but bigger, with white/dark/yellow different colour types, long arms good for climbing ... good at singing, each call has three notes ... can make flutes from its arm bones"
Hunan	Zhuzhou	S	1763		1	"changbiyuan"
Jiangsu	Suzhou	S	265-420	326	1	
Jiangxi	Fuzhou	S	1871		1	"yuan, hou"
Jiangxi	Ganzhou	S	1873		1	"hou, yuan"; records up to 1873 mention both "hou" and "yuan", whereas records from 1875 only mention "hou", suggesting that "yuan" has become locally extinct
Jiangxi	Ji'an	S	1087		2	
Jiangxi	Jingdezhen	S	1870		1	"hou, yuan"
Jiangxi	Jiujiang	S	1870		1	"hou, yuan"
Jiangxi	Nanchang	S	1873		1	"hou, yuan"
Jiangxi	Pingxiang	S	1860		1	"changbiyuan"
Jiangxi	Shangrao	S	1872		1	"yuan"; 1873 record provides description that is not convincing - refers to its arms specifically, but otherwise only discusses its virtues/kindness, the duration of its pregnancy, and mentions that it has a short tail
Jiangxi	Yichun	S	1940		1	"yuan hou"; 1873 record specifically mentions "changbiyuan", and 1860 record lists a number of primates including "yuan, hou, white yuan, golden-haired yuan"
Shaanxi	Ankang	N	1731		1	"yuan (comparatively many different kinds)"
Shaanxi	Hanzhong	N	1522-1566	1542	1	"yuan, hou and small monkey"
Shaanxi	Shangluo	N	1735-1796	1763	1	Undated (late) report states that yuan, tiger and sika deer are all now locally extinct, but during the reign of the Qianlong Emperor (1735-1796) the forests were full of wild beasts, indicating that these species were regionally present during that time

Shaanxi	Weinan	N	1735		1	"at the top of the most striking, highest cliffs, the fuyuan sits squatting on the edge"
Shaanxi	Xi'an	N	1779		1	"macaque, yuan [yuan female is plain/drab, and the male is black]"
Shandong	Linyi	N	1736		1	"drab-coloured yuanyuan, which sadly yells tortuous cries" at Pingyi County, eastern Mengshan
Shanxi	Jincheng	N	1874		1	people catch and eat yuan nao in the mountains of Yangcheng County; record also including folklore and older traditions
Shanxi	Linfen	N	1760		1	at Hongdong County
Shanxi	Yuncheng	N	1659		1	at Jiang County
Sichuan	Dazhou	N	1932		1	"yuan, hou, small monkey"
Sichuan	Guangyuan	N	762		2	at Guangyuan
Sichuan	Leshan	N	1522-1566	1540	1	"changbiyuan"
Sichuan	Liangshan	N	1893		1	"yuan, hou"; also 1874 record
Sichuan	Luzhou	S	8th century	719	2	at Luxian
Sichuan	Meishan	N	1522-1566	1550	1	"has macaques, has yuan"
Sichuan	Mianyang	N	978		2	
Sichuan	Ngawa/Qiang	N	11th century	1073	2	
Sichuan	Panzhihua	N	1859		1	"changbiyuan"
Sichuan	Ya'an	N	1799		1	1941 record lists "yuanhou" but seems to refer to a single type of animal, and only lists locations where this animal is found rather than offering any description; 1931 record lists yuan, hou, nao - but only difference given between yuan and hou is that yuan has short fur whereas hou has long fur, so very unlikely to actually refer to gibbon
Sichuan	Yibin	S	1522-1566	1552	1	"yuan" [not listed together with other primates]
Yunnan	Baoshan	S	extant		6	
Yunnan	Chuxiong	S	extant		6	
Yunnan	Dali	S	1902		1	"yuan, antelope, white yuan"; similar record from 1890
Yunnan	Dehong	S	extant		6	
Yunnan	Honghe	S	extant		6	
Yunnan	Kunming	S	1696		1	"yuan, hou"
Yunnan	Lincang	S	extant		6	

Yunnan	Nujiang	S	1985		5	
Yunnan	Pu'er (Simao)	S	extant		6	
Yunnan	Qujing	S	1904		1	"changbiyuan"; later report from 1934 lists "yuan, hou", but provides very poor description that is unlikely to represent a gibbon; report from 1885 lists "yuan, hou"
Yunnan	Wenshan	S	1932		1	"yuan, hou"
Yunnan	Xishuangbanna	S	extant		6	
Yunnan	Yuxi	S	extant		6	
Yunnan	Zhaotong	S	1942		1	"yuan, hou"
Zhejiang	Hangzhou	S	814		2	at Lingshandong and Moshanyudong
Zhejiang	Huzhou	S	1750		1	under "monkey" category, records description of gibbon (long arms, good at singing) from Anjizhou County, Tianmushan area (including Anji and Linan in the mountains)
Zhejiang	Jiaxing	S	1922		1	"yuan" in Haining
Zhejiang	Jinhua	S	1753		1	"yuan, hou" in Xuanping County [= Wuxi County]
Zhejiang	Lishui	S	1896		1	"yuan, hou" in Suichang; 1876 record from Jinyun reports that nowadays only monkeys and macaques occur at this locality, but in the Ming Dynasty there were gibbons as well
Zhejiang	Ningbo	S	1926		1	at Chicheng [= Ninghai]; also 1927 record from Xiangshan County of gibbons that probably refers instead to macaques; also many earlier records (1223, 1792, 1879, 1888, 1899)
Zhejiang	Quzhou	S	1926		1	"yuan, hou" at Qujiang; many earlier records (1701, 1711, 1822, 1873)
Zhejiang	Shaoxing	S	1936		1	"yuan, hou" at Yunji [=Yue Cheng]; many earlier records (1214, 1573-1619, 1671, 1792, 1870, 1891, 1918); by 1918 described as "seldom found"; earlier records refer to both black and white gibbons
Zhejiang	Taizhou	S	1934		1	"yuan, hou" at Linhai; many earlier records (1223, 1522-1566, 1894, 1926)
Zhejiang	Wenzhou	S	1912		1	monkeys and different-coloured gibbons [males and females?] at Yueqing; older records (1865, 1878) list gibbons and two other types of primates

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