Threatened Birds of Asia: The BirdLife International Red Data Book

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This species qualifies as Vulnerable because it is inferred to have a small, declining, severely fragmented population as a result of forest loss through logging, conversion to agriculture and localised tourist developments.

**DISTRIBUTION** The Grey-hooded Parrotbill is endemic to China, where it is known from a few mountains near the edge of the densely populated Sichuan basin in south-central Sichuan and western Guizhou, with records (by province) as follows:

**CHINA**  
Sichuan Erlang Shan, Luding county, collected at the summit (3,437 m: Map Publishing Company 1977), July 1960 (two), April 1982 (five) (Cheng Tso-hsin et al. 1987, Yu Zhiwei in litt. 1997); Emei Shan (Omei Shan), many specimens collected and sight records, almost all around the summit (Jin Ding, Golden Top): 15 collected, c.3,200 m, April 1939, July 1956 (two), April 1959, June 1959, April 1960 (three), October 1979 (two), May 1980 (three), May 1981 (two) (Cheng Tso-hsin et al. 1963b, Yu Zhiwei in litt. 1997, three in ASCN),
c.12, April 1985 (Buck 1985), May–June 1986 (Turton and Speight 1986, “not uncommon”, April–May 1986, in small flocks in bamboo in very open coniferous forest (Robson 1986), March–April 1987 (Goodwin 1987), “rather common”, May–July 1987 (F. G. Rozendaal in litt. 1987), five, including three at Wannian (which is at c.1,000 m), the only record away from the summit, January 1988 (Hornskov 1988), five, May 1991 (Jihmanner 1991), “common”, 3,000 m, June 1998 (J. Martens in litt. 1999); Wa Shan mountain, Yongsheng township, Jinkouhe area, Ebian county, seven adults (including the type) collected, “occurs in fair numbers”, 2,590–3,050 m, May, October and November 1908 (Thayer and Bangs 1912, three specimens in MCZ and ZMB; also Cheng Tso-hsin 1987), collected, December 1979 (two), March 1980, April 1981 (two) (Yu Zhiwei in litt. 1997), collected at Yongsheng, December 1979 (four specimens in ASCN); Daqiao township, Ganluo county, three collected, November 1978 (Yu Zhiwei in litt. 1997); Luoziyida, north bank of Wahe river, Meigu county, May 1998 (Dai Bo 1998); Silipin, Meigu Dafengding, here assumed to be within Meigu Dafengding Nature Reserve, Meigu county, May 1998 (Dai Bo 1998); Mabian Dafengding Nature Reserve, Mabian county, two, 2,400 m, May 1986 (King 1989b);

Guizhou Cao Hai, Weining county, specimens collected, 2,350–2,725 m, December 1978 (Wu Zhi-kang et al. 1986); near Jiucaping, Hezhang county, specimens collected, 2,350–2,725 m, March 1982 (Wu Zhi-kang et al. 1986).

POPULATION There is very little information available on the population of this species. It is locally common around the summit of Emei Shan (several observers in litt.) and a flock of ten was seen at one site in Guizhou (Wu Zhi-kang et al. 1986). These and other records indicate that it can exist at fairly high densities in suitable habitat, but the small number of localities and its highly localised distribution suggest that it could have a small total population; moreover, it is likely to have declined because of habitat loss.

ECOLOGY Habitat Grey-hooded Parrotbill is usually found in small flocks, and inhabits scrub, bamboo and rhododendron in temperate-zone coniferous forest, usually between about 2,350 and 3,450 m (but with one record from c.1,000 m on Emei Shan: Hornskov 1988) (Wu Zhi-kang et al. 1986, Cheng Tso-hsin 1987; see Distribution). On Emei Shan, this species appears to be mainly confined to an extensive “bushy” area below the summit, with a rich variety of shrub species, dwarf bamboo and a few interspersed fir Abies, which is surrounded by mixed fir and rhododendron forest; thus the area of suitable habitat on the mountain may be very limited (Robson 1986, P. Alström in litt. 1993, J. Martens in litt. 1999). It occurs amongst the human habitations there, where it is “seemingly not disturbed by the thousands of pilgrims and tourists” (F. G. Rozendaal in litt. 1987). Its habitat selection on Emei Shan, and the fact that several of the other known localities are also around the summits of mountains, indicate that this species is probably specialised to open forest and scrub patches on exposed peaks and ridges near to mountain tops; such habitat is naturally highly localised and fragmented.

Food This species feeds on insects, including beetles, and seeds (Yu Zhiwei in litt. 1997, Zheng Guangmei and Wang Qishan 1998). The comment concerning bamboo under Migration suggests that bamboo seeds may be important in the diet.

Breeding There is no information.

Migration On Emei Shan, it has been reported that “shortly after the bamboo flowered and died they moved down very slightly into the forest” (P. Alström in litt. 1993), and there is a record from the lower slopes of the mountain at Wannian in January (Hornskov 1988), indicating that it may undertake some altitudinal movements outside the breeding season.

THREATS The Grey-hooded Parrotbill is one of five threatened members of the suite of 10 bird species that are entirely restricted to the “Central Sichuan Mountains Endemic
**Threatened birds of Asia**

**Table 1. Changes in the extent of natural habitats within this species’s range in south-west China.**

The data in this table are reproduced from MacKinnon *et al.* (1996), and show the estimated areas (both original and remaining in km²) of presumably suitable habitats within this species’s known range, and the area of each habitat estimated within existing protected areas. However, it is important to note that this only gives an indication of the extent of reduction of presumed habitats, as there is no information on the time-scale over which they have been lost, and this species does not necessarily occur throughout each habitat in each province.

<table>
<thead>
<tr>
<th>Province</th>
<th>Habitat</th>
<th>Original</th>
<th>Remaining</th>
<th>%</th>
<th>Protected</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sichuan</td>
<td>deciduous broadleaf forest</td>
<td>55,413</td>
<td>3,887</td>
<td>7</td>
<td>1,623</td>
<td>2.9</td>
</tr>
<tr>
<td>Sichuan</td>
<td>cold coniferous forest</td>
<td>100,213</td>
<td>57,459</td>
<td>57</td>
<td>2,319</td>
<td>2.3</td>
</tr>
<tr>
<td>Sichuan</td>
<td>deciduous/evergreen broadleaf forest</td>
<td>34,461</td>
<td>4,048</td>
<td>12</td>
<td>2,123</td>
<td>6.2</td>
</tr>
<tr>
<td>Sichuan</td>
<td>montane evergreen oak forest</td>
<td>9,292</td>
<td>6,504</td>
<td>70</td>
<td>46</td>
<td>0.5</td>
</tr>
<tr>
<td>Guizhou</td>
<td>deciduous/evergreen broadleaf</td>
<td>77,770</td>
<td>3,800</td>
<td>5</td>
<td>1,263</td>
<td>1.6</td>
</tr>
</tbody>
</table>

Bird Area”, threats and conservation measures in which are profiled by Stattersfield *et al.* (1998).

**Habitat loss**

The main threat to this species is likely to be the loss and fragmentation of its habitat (Zheng Guangmei and Wang Qishan 1998). Forest cover has declined rapidly in Sichuan since the late 1960s, because timber quotas have consistently been set above sustainable levels, and forest has been cleared for cultivation and pasture; the province’s forest cover is estimated to have declined from 19% to 12.6% between the early 1950s and 1988, mature natural forest being particularly affected (Smil 1984, 1993). Substantial areas of the temperate-zone forest where this species is assumed to breed have been lost (Table 1), although it is unclear whether this general reduction in forest cover will have seriously affected this high-altitude species. On Emei Shan, the limited area of open forest and scrub that this species inhabits was partially cleared in June 1998 for the construction of a tourist railway, and once completed the increased number of tourists visiting the summit could further negatively affect its habitat (J. Martens *in litt.* 1999). It is possible that the periodic flowering and die-off of the bamboo which Grey-hooded Parrotbill inhabits, in combination with habitat fragmentation, may affect the population of this and other species which inhabit bamboo (see MacKinnon *et al.* 1989).

**MEASURES TAKEN**

**Protected areas**

The range of Grey-hooded Parrotbill overlaps with the southern part of the current distribution of the giant panda *Ailuropoda melanoleuca* (Zhao Ji *et al.* 1990). Like this bird, the giant panda occurs in temperate-zone forests with a bamboo understorey, and several of the reserves which have been established for it and for other large mammals contain areas of potential habitat for this species. Grey-hooded Parrotbill is recorded from the following protected areas in Sichuan: Emei Shan Protected Scenic Area (100 km², forests apparently in good condition, but disturbed by very large numbers of tourists), Mabian Dafengding Nature Reserve (340 km², forests on lower parts of hills damaged) and Meigu Dafengding Nature Reserve (180 km², forests apparently in fine condition, but damaged in the lowlands); in Guizhou, it is recorded from Caohai, but it is unclear whether Caohai Nature Reserve includes any suitable forest habitat within its boundaries (sizes and condition from MacKinnon *et al.* 1996). Emei Shan is protected by its status as one of China’s five sacred mountains (Robson 1989), although development for tourism there is causing some localised forest loss (J. Martens *in litt.* 1999, MJC).

**MEASURES PROPOSED**

**Legislation**

Zheng Guangmei and Wang Qishan (1998) proposed that Grey-hooded Parrotbill should be listed as a nationally protected species in China.

**Protected areas**

MacKinnon *et al.* (1996) made the following recommendations for the protected areas where this species has been recorded: at Emei Shan Protected Scenic Area, gazette as a nature reserve, if not already done so, control tourism and strengthen research.
work; link up and jointly manage Mabian Dafengding and Meigu Dafengding Nature Reserves. The species has also been recorded in the Washan proposed nature reserve (160 km², forests probably in fine condition), which should be gazetted (MacKinnon et al. 1996).

**Research** Ecological studies are required to clarify the habitat requirements, altitudinal range and population status of this species, and to determine the extent to which its habitats are being reduced or fragmented. Surveys are required (particularly targeting open areas of forest and scrub on high ridges and around the summits of mountains) to establish whether it occurs in any of the other protected areas in or near its known range, for example in western Guizhou and northern Yunnan.