

Conservation news

New hope for the Hainan gibbon: formation of a new group outside its known range[†]

The Hainan gibbon *Nomascus hainanus* is endemic to China's Hainan Island and is the world's rarest primate species. Once widespread throughout the island, a relict population of < 10 individuals survived in a single forest patch in Hainan Bawangling National Nature Reserve in the 1970s (Liu et al., 1989, *American Journal of Primatology*, 19, 247–254). The species was hovering on the brink of extinction, with only two family groups, until the turn of the new millennium. Since 2003, however, following conservation efforts by Kadoorie Farm & Botanic Garden and local conservation authorities, the gibbon population has gradually recovered, with a third and fourth family group formed in 2011 and 2015, respectively. The entire population of this Critically Endangered species was restricted to a c. 16 km² forest fragment in the Mt Futouling area of the Reserve (Chan, 2015, in *Primates in Peril: The World's 25 Most Endangered Primates 2014–2016*, pp. 67–69.)

At the end of 2019, the Reserve's gibbon monitoring team made an exciting discovery: a newly-formed pair of Hainan gibbons was detected in a forest c. 8 km north of the known gibbon range. This discovery is a milestone for the conservation of the Hainan gibbon as it represents the largest number of family groups in recent history and indicates the species' ability to expand its range.

This pair of gibbons were first reported by local villagers in October 2019, and confirmed, with the detection of a male solo call, by our community monitoring team in early November 2019 during a reconnaissance survey. A pair of gibbons were observed for the first time in mid December 2019 but only the male performed solo calls. The female joined the duets in early January 2020 and well coordinated duet calls were detected in mid January 2020.

The newly formed family group lives on the forested slopes of Mt Dongbengling, which rises to c. 850 m altitude. Vegetation of the area is dominated by grassy shrubland and secondary lowland forest, with remnant primary forest surviving in ravines and near the summit. The northward lowland adjacent to Mt Dongbengling has been converted to a rubber plantation estate, and the gently sloping southern valley between Mt Dongbengling and Mt Futouling was once covered in pine plantations and fire-maintained grassland, and must previously have presented an impassable barrier to the gibbons. Following natural succession the valley is now covered in forest, and the new gibbon group must

have used it as a corridor to explore suitable lowland habitat to establish their territory beyond Mt Futouling. The ability of the Hainan gibbon to utilize secondary forest and substantially expand its range is an encouraging sign for the long-term survival of the species, which appears to be slowly but steadily recovering.

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Conserving *Meconopsis smithiana*, a Critically Endangered plant species in Yunnan, China

Meconopsis smithiana (Handel-Mazzetti) G. Taylor ex Handel-Mazzetti, a perennial herb species of the family Papaveraceae, is endemic to the southern Hengduan Mountains in south-west China and the extreme north-east of Myanmar. It was first collected by Handel-Mazzetti in north-west Yunnan in 1916, and described by him as *Cathcartia smithiana* in 1923 (H. Handel-Mazzetti, 1923, *Anzeiger der Akademie der Wissenschaften in Wien, Mathematisch-Naturwissenschaftliche Klasse*, 60, 182). Since then, the species had only been collected a further four times, once each in 1938 and 1940, and twice in 1982, by Tse Tsun Yü, Kuo Mei Feng, and the Qinghai-Tibet Expedition, respectively. According to these collections (Tse Tsun Yü 20663; Kuo Mei Feng 8344; Qinghai-Tibet Expedition 8346, 8737), at the herbarium of the Kunming Institute of Botany, Chinese Academy of Sciences, this species is only known from the Irrawaddy–Salween divide, in the southern Hengduan Mountains, an area of c. 4,000 km² in western Yunnan.

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