

Discovery of Hume's Pheasant (*Syrmaticus humiae*) in Guizhou Province, southwestern China

Aiwu JIANG^{1,2,✉}, Zhiying CHENG³, Xiantang LIANG³

¹Department of Chemistry & Life Sciences, Hechi University, Yizhou 546300, China

²School of Life Sciences, Lanzhou University, Lanzhou 730000, China

³Administration Bureau of Guangxi Jinzhongshan National Nature Reserve, Longlin 533414, China

Keywords *Syrmaticus humiae*, new record, distribution

Introduction

Hume's Pheasant (*Syrmaticus humiae*), including two subspecies, is distributed in northeastern India, Myanmar, northern Thailand and southwestern China (Collar et al., 2001). In China its distribution has been assumed to be restricted to Yunnan and northwestern Guangxi (Mackinnon et al., 2000; Zheng, 2011). Hume's Pheasant is listed as a Near Threatened species by IUCN for its small and fragmented population (BirdLife International, 2011). It has also been ranked as a Class I National Key Protected Animal in China. Although the distribution range of Hume's Pheasant in Guangxi and Guizhou is only separated by the Nanpan and Hongshui rivers, this pheasant had not been previously recorded in Guizhou Province. Jinzhongshan National Nature Reserve was established in 2008 with the express purpose of protecting the population of Hume's Pheasant in northwestern Guangxi. This area is separated from southwestern Guizhou Province by the Nanpan River, prior to its damming in 1997 only about 50 m at its widest, yet ornithologists had not previously recorded Hume's Pheasant on the Guizhou side of the river (Wu et al., 1986).

We have studied Hume's Pheasant for about eight years in Jinzhongshan National Nature Reserve. Using radio transmitters, we found that Hume's Pheasant had spread on the Guangxi side of the Nanpan River. Some local hunters also told us that they had captured some pheasants in Guizhou Province many years ago. Therefore, a survey of Hume's Pheasant was conducted in southwestern Guizhou Province.

A pile of plumage, including that of Lady Amherst's Pheasant (*Chrysolophus amherstiae*), the Mountain Bamboo-Partridge (*Bambusicola fytchii*) and Hume's pheasant were collected from a logging shed in Jishanlin Village (24°45'25.2"N, 104°49'55.5"E), Cangjiantang Town, Xingyi City, southwestern Guizhou Province in March 2012 (Fig. 1). Anonymous local people admitted they captured these pheasants using traditional traps in a nearby forest. The plumage collected in Guizhou Province was that of an adult male Hume's Pheasant and absolutely similar to the specimens collected from the Jinzhongshan National Nature Reserve in all its different parts. Some plumage of Hume's Pheasant was also observed on the capture site. Therefore, we firmly believed this pheasant was captured from Guizhou Province.

Habitats

Hume's Pheasants are found in fragmented forests

Received 13 April 2012; accepted 20 May 2012

✉ Author for correspondence (Aiwu Jiang)
E-mail: aiwuu@163.com

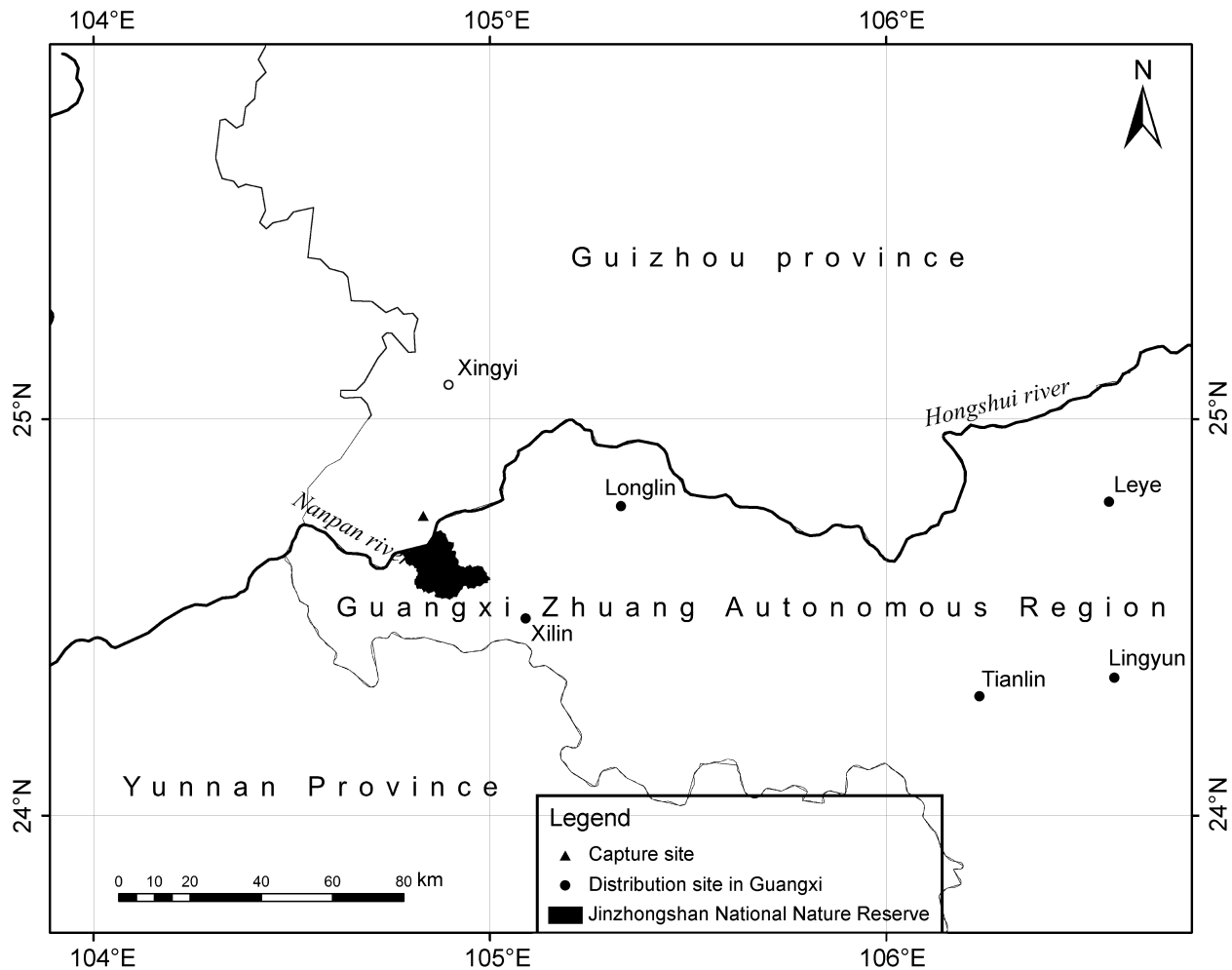


Fig. 1 Capture site in Guizhou Province

consisting of *Pinus massoniana* and *Cunninghamia lanceolata* trees, as well as in a plantation of *Eucalyptus* spp. with a few broad-leaved evergreens. One bird was captured in a small temperate broad-leaved forest patch with a total area about 400 m², about 4 km from the Nanpan River (Fig. 2). The patch is dominated by *Castanopsis eyrei* and *Eurya groffii*. These two common plants are the main source of food for Hume's Pheasant in the Jinzhongshan National Nature Reserve (Liu, 1991). Other Galliformes birds, including Lady Amherst's Pheasant, the Mountain Bamboo-Partridge, the Red Junglefowl (*Gallus gallus*), the Common Pheasant (*Phasianus colchicus*) and the Chinese Francolin (*Francolinus pintadeanus*) were also observed in this habitat.

Discussion

Hume's Pheasant has the largest range of five *Syrmatiscus* birds and is distributed in Thailand, Indian, Myanmar and southwestern China (Howard and Moore, 1991; Collar et al., 2001). In Guangxi, Hume's Pheasant was restricted to the six northwestern counties adjacent to Guizhou Province including Longlin, Xilin, Leye, Lingyun, Tianlin and Tian'e (Wu, 1984; Liu, 1991; Li et al., 1998; Zhou et al., 2011). Although a careful survey of Hume's Pheasant was conducted in the last 1970s and early 1980s, it had not been found on the north side of Nanpan River, southwestern Guizhou Province (Wu et al., 1986). Therefore, the Nanpan River was



Fig. 2 Habitat of Hume's Pheasant in southwestern Guizhou Province (Blue arrow indicates capture site)

considered by some ornithologists as a natural barrier for Hume's Pheasant (Liu et al., 1990; Liu, 1991; Li et al., 1998). However, our finding expands the range of Hume's Pheasant in China. Hume's Pheasant possibly originated from the Wuling Mountain Range in late or middle Pleistocene (Ding, 1998). If this conclusion is true, Hume's Pheasant certainly went through Guizhou Province when it spread from its centre of origin to Guangxi. In other words, Hume's Pheasant had historically been distributed in Guizhou Province. This discovery has confirmed a small population of Hume's Pheasant inhabiting on southwestern Guizhou Province. Tianshengqiao, a large reservoir on Nanpan River, was dammed early in 1994, with water impoundment in 1997. The width has increased to an average of about 500 m since the Nanpan River was dammed and the vegetation on both sides is dominated by shrub and grassland (Zheng et al., 2005). For these reasons, Hume's Pheasant likely did not spread from Guangxi to Guizhou in the last 20 years.

In Guizhou Province, the forest where Hume's Pheasant were detected belonged to the local villagers. Most native forest has not been effectively managed and has

already been transformed to barren land or planted forest. Although Hume's Pheasant can rely on broken or fragmented forest (McGowan and Garson, 1995), habitat loss is considered a main threat to Hume's Pheasant in southwestern Guizhou Province. Furthermore, the poaching of pheasants for food by traditional traps could soon lead to population decline. Therefore, an urgent population assessment of Hume's Pheasant in southwestern Guizhou Province is very important for the conservation of this rare bird.

Acknowledgements We thank some anonymous hunters for providing the information of Hume's Pheasant in Guizhou Province. We also thank Tommaso Savini and Mike Cline for their comments and advice on our manuscript. This work was financed by the National Natural Science Foundation of China (No. 31000965) and the Forestry Department of Guangxi Zhuang Autonomous Region.

References

BirdLife International. 2011. *Syrmaticus humiae*. <http://www.birdlife.org>. Accessed 25 March 2012.

- Collar NJ, Crosby R, Crosby MJ. 2001. Threatened birds of Asia: the BirdLife International red data book. BirdLife International, Cambridge, UK.
- Ding P. 1998. The distributions and systematic analysis of the long-tailed pheasant. *Life Sci Res*, 2(2):122–131. (in Chinese)
- Howard R, Moore A. 1991. A Complete Checklist of the Birds of the World. Academic Press Ltd, London.
- Li HH, Yu TL, Shen LT. 1998. The birds of *Tragopan cuvier* and *Syrnaticus wagler* and theirs geological distribution in Guangxi, China. *J Guangxi Normal Univ (Nat Sci)*, 16(3):76–80. (in Chinese)
- Liu XF. 1991. *Syrnaticus humiae*. In: Lu TC (ed) Chinese Wildlife Endangered Galliformes. Fujian Science and Technology Press, Fuzhou. (in Chinese)
- Liu XH, Zhou F, Pan GP, Ao DL. 1990. Ecology and distribution of *Syrnaticus humiae* in Guangxi. *J Guangxi Forest*, 4:25–26. (in Chinese)
- MacKinnon JR, Phillipps K, He FQ. 2000. A Field Guide to the Birds of China. Hunan Education Press, Changsha. (in Chinese)
- McGowan PJK, Garson PJ. 1995. Peasant: Status Survey and Conservation Action Plan, 1995–1999, IUCN.
- Wu MC. 1984. Ecology and distribution of pheasant in Guangxi. *J Chinese Wildl*, 6:12–14. (in Chinese)
- Wu ZK, Lin QW, Yang JL. 1986. Guizhou Avifauna. Guizhou People Press, Guiyang. (in Chinese)
- Zheng GM. 2011. A Checklist on the Classification and Distribution of the Birds of China. 2nd edition. Science Press, Beijing. (in Chinese)
- Zheng LF, Hao FH, Yang ST. 2005. RS-based analysis of land cover change in the region surrounding Tianshengqiao No.1 hydropower reservoir before and after its construction. *Res Soil Water Conserv*, 12(2):80–82, 85. (in Chinese)
- Zhou F, Jiang AW, Mo YM, Wei ZY, Wang B. 2011. The Checklist of Terrestrial Vertebrate Distribution in Guangxi. China Forestry Publishing House, Beijing. (in Chinese)

贵州发现黑颈长尾雉(*Syrnaticus humiae*)

蒋爱伍^{1,2}, 程志营³, 梁显堂³

(1 河池学院化学与生命科学系, 宜州, 546300; 2 兰州大学生命科学学院, 兰州, 730000;
3 广西金钟山国家级自然保护区管理局, 隆林, 533414)

关键词: *Syrnaticus humiae*, 新记录, 分布