

The status and distribution of green peafowl *Pavo muticus* in Yunnan Province, China

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Abstract Data on the status and distribution of the green peafowl in Yunnan Province, China, were collected from historical data, field surveys carried out between March and June 2007 around Shuangbai and Baoshan, and from a correspondence survey among city, state and county Forestry Bureaux and Protection Agencies. The data showed that green peafowl occurred historically in at least 42 locations, but by the late 1980s they were already absent from Yingjiang, Tengchong, Liuku, Mengzi and Hekou, and by the late 1990s were also absent from Mengla, Jinping and Luchun and Jianshui County. Green peafowl were found to be present in 31 known areas: Weishan, Yongren, Jinghong, Ruili, Longchuan, Luxi, Longling, Changning, Fengqing, Yunxian, Yongde, Chenkang, Kengma, Cangyuan, Shuangjiang, Lincang, Jingdong, Jinggu, Chenyuan, Pu'er, Simao, Menghai, Mojiang, Shiping, Maitreya, Sinping, Shuangbai, Chuxiong, Lufeng, Nanhua, and Yao'an. Among these, Weishan, Yongren, Jing Hong, Mengla have only supported green peafowl since the latter half of the 1980s. This evaluation also located green peafowl in six new areas, namely Baoshan, Nanjian, Lancang, Yuxi, Shidian and Honghe. It remains unknown if two further areas, Weixi and Deqin, have green peafowl present.

Keywords China, distribution, green peafowl, status, Yunnan

Introduction

Green peafowl *Pavo muticus* is listed as 'Vulnerable' by IUCN (IUCN 2008), is on Appendix II of the Convention on Trade in Endangered Species of Flora and Fauna (CITES) and is considered a National Priority Level 1 Protected Animal under the "National Priority Protected Wild Animal List" in China. Since the Cultural Revolution in China and during the early period of reform and open policy, people systematically exploited the forests, barren hills and grassy slopes utilised by green peafowl in Yunnan for food and to generate an income. People also freely hunted green peafowl without any control. As a result, the distribution of green peafowl contracted suddenly and led to a sharp decline in its abundance. Following 10 years of recent research, it is now considered that the green peafowl is mainly limited within Yunnan to the tropical forest area on the banks of the middle and lower reaches of the Lanchan, Nu Red Rivers. Moreover, while the distributional area was still large, the abundance in each area is small. The latest population estimate of green peafowl in Yunnan Province is between 800 and 1100 individuals (Wen Xianji et al., 1995).

Methods

Data on the current status of green peafowl in Yunnan Province was collected using three methods: i) reviewing historical data, ii) rapid field surveys between March and June, 2007 around Shuangbai and Baoshan, and iii) questionnaire survey by correspondence with city, state and county forestry bureaux and the protection agencies. Data were collated and plotted on a map of Yunnan using the Arcview3.0 software (Kang-tsung Chang 2001).

Results

Green peafowl distribution within Yunnan Province is shown in FIG. 1. Detailed locations, by county, are given in TABLE 1.

Discussion

A previous investigation of the distribution of green peafowl in Yunnan Province made during 1991 - 1993 showed that they were present in Yingjiang, Tengchong, Liuku, Mengzi and Hekou before the latter half of 1980s, but our survey indicated green peafowl has now disappeared from these areas. In total, 34 areas were considered to have green peafowl present,

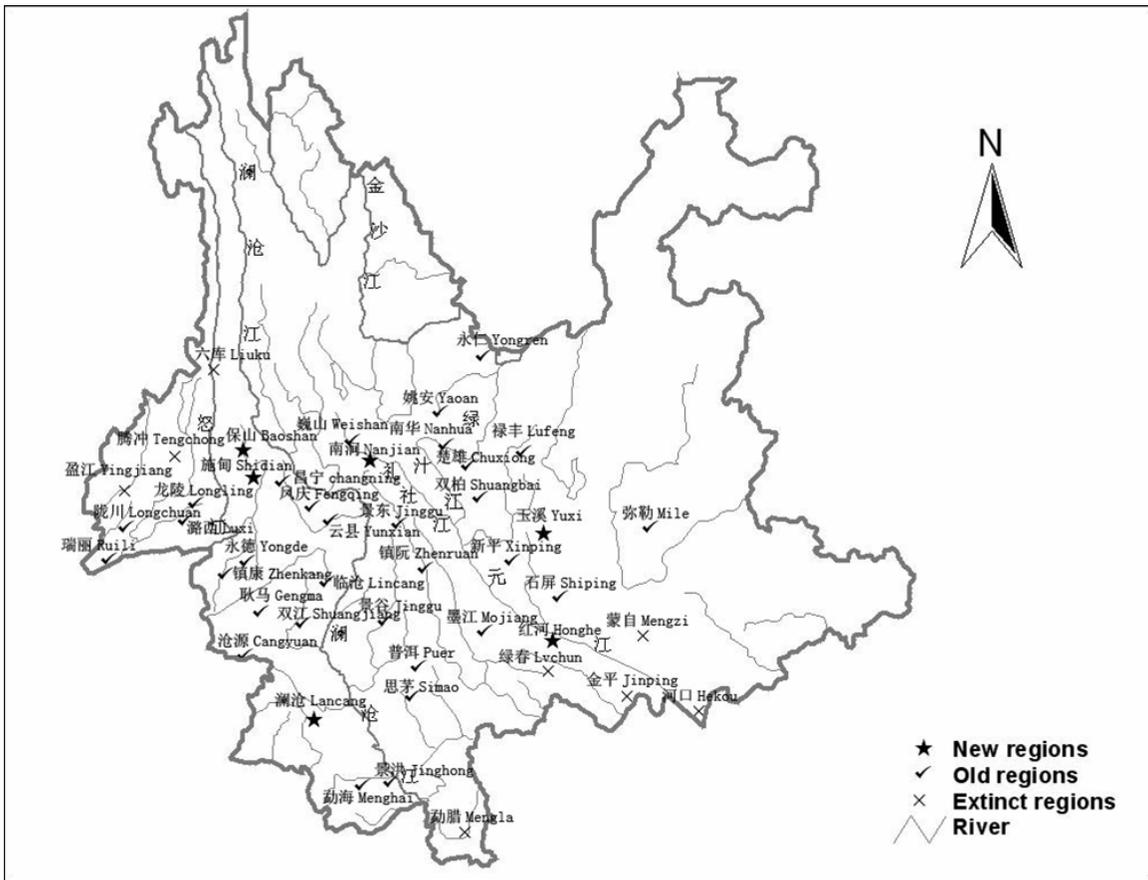


FIG. 1 Distribution of green peafowl in Yunnan Province, China.

TABLE 1 The current status of green peafowl in Yunnan Province, China, by county.

County	Description
Yuxi	Green peafowl were recorded in the Eshanyubaiding Forest Farm by the Wildlife Conservation Office as recently as 2005.
Xinping	Green peafowl are present in the Eastern basin of Shiyangjiang River in Gasha Township, on the border of Xinping and Shuangbai County.
Changning	Green peafowl may still be present in the Xigui Forest Farm in Changning County. They may also be present in Genga and Wandian Townships.
Shidian	Green peafowl may still be present in Jiucheng and Jiufang Townships.
Honghe	Green peafowl were present in Jianshui County, Xizhaung Township until at least 2006.
Jinghong	Green peafowl were present in Dadugang, Zhengnuo, Menyong and Jinuoshan until 2004 at least.
Menghai	Green peafowl are present in the Mangao Nature Reserve.

namely, Weishan, Yongren, Jinghong, Mengla, Ruili, Longchuan, Luxi, Changning, Fengqing, Yunxian, Yongde, Chenkang, Kengma, Cangyuan, Shuangjiang, Lincang, Jingdong, Jinggu, Chenyuan, Pu'er, Simao, Menghai, Mojiang, Luchun, Jinping, Longling, Shiping,

Maitreya, Sinping, Shuangbai, Chuxiong, Lufeng, Nanhua, and Yao'an. Among these sites, Weishan, Yongren, Jing Hong, Mengla appear to have had green peafowl only since the latter half of the 1980s. Whether Weixi and Deqin still have green peafowl is unknown (Wen Xianji et al., 1995). Luo & Dong (1998)

investigated the distribution of green peafowl in Jing Hong, Mengla and Menghai, in the south part of Yunnan, and reported it had disappeared from Mengla since 1990. Yang et al. (1997) investigated the status of green peafowl in southeast and northwest Yunnan and showed that it had already vanished in Mengzi, Jinping and Luchun, but found new locations Jianshui County. According to their results, green peafowl were present in Yunnan at 31 locations by 1996.

The results of our investigation indicated that green peafowl were still present at six previously unknown sites: Baoshan, Nanjian, Lancang, Yuxi, Shidian and Honghe. At Baoshan, green peafowl were still present until at least 2005; however, because of recent logging activity and cattle grazing, the continued presence of green peafowl in this area is in question. In Nanjian, people reported occasional records of green peafowl, but no definite numbers could be obtained.

Although green peafowl are listed as protected in China, in the remote mountain areas poaching is still a threat and difficult to control. In addition, the habit of green peafowl foraging around food crops on the edge of farmland brings them into conflict with people, who occasionally soak grain in poison to protect their crops from a perceived threat. Such action can entirely annihilate a whole group of green peafowl.

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References

- HAN, L.X., LUO, X., HAN, X.B. & WANG, C. (2006) The distribution status and the habitat of the green peafowl in Jingu. *Studies on International Forum on Man and Birds*, 93-97.
- IUCN (2008) 2007 *IUCN Red List of Threatened Species*. [Http://www.redlist.org](http://www.redlist.org). [accessed 1 Mar 2008].
- CHANG, K.T. (2001) *Introduction to geographic information systems*. pp. 142-144. McGraw Hill, USA.
- LUO, A.D. & DONG, Y.H. (1998) Investigation on the current status of distribution and population of the green peafowl in Xishuangbanna. *Chinese Journal of Ecology*, 17(5), 6-10.
- WEN, X.J., YANG, X.J., HAN, L.X. & YANG, L. (1995) Investigations on the current status of the distribution of the Green Peafowl in China. *Chinese Biodiversity*, 3(1), 46-51.
- XU, H. (1995) The distribution status and protection measure of *Pavo muticus* in Chuxiong District. *Yunnan Forestry Science and Technology*, 27(3), 48-53.
- YANG, X.J., WEN, X.J. & YANG, L. (1997) The races of Green Peafowl in southeast and northwest Yunnan Province, China. *Zoological Research*, 18(1), 12-18.

Biographical sketches

LIANXIAN HAN is a professor at the Southwest Forestry College and has for a long time undertaken bird research. YUEQIANG LIU is his postgraduate engaged in the study of bird conservation and animal behaviour. BENG HAN is a student of Southwest Forestry College, engaged in wildlife conservation.