



The Journal of Threatened Taxa (JoTT) is dedicated to building evidence for conservation globally by publishing peer-reviewed articles online every month at a reasonably rapid rate at www.threatenedtaxa.org. All articles published in JoTT are registered under [Creative Commons Attribution 4.0 International License](#) unless otherwise mentioned. JoTT allows unrestricted use, reproduction, and distribution of articles in any medium by providing adequate credit to the author(s) and the source of publication.

Journal of Threatened Taxa

Building evidence for conservation globally

www.threatenedtaxa.org

ISSN 0974-7907 (Online) | ISSN 0974-7893 (Print)

COMMUNICATION

CURRENT STATUS OF BIRDS IN TENGCHONG SECTION OF GAOLIGONG-SHAN NATIONAL NATURE RESERVE, CHINA

Xi Zheng, Fei Li, Zheng Bi, Xing-Chao Zhang, Ji-Guo Han & Bosco Pui Lok Chan

12 September 2019 | Vol. 11 | No. 11 | Pages: 14415–14433

DOI: 10.11609/jott.4440.11.11.14415-14433



Monograph



For Focus, Scope, Aims, Policies, and Guidelines visit <https://threatenedtaxa.org/index.php/JoTT/about/editorialPolicies#custom-0>

For Article Submission Guidelines, visit <https://threatenedtaxa.org/index.php/JoTT/about/submissions#onlineSubmissions>

For Policies against Scientific Misconduct, visit <https://threatenedtaxa.org/index.php/JoTT/about/editorialPolicies#custom-2>

For reprints, contact <ravi@threatenedtaxa.org>

The opinions expressed by the authors do not reflect the views of the Journal of Threatened Taxa, Wildlife Information Liaison Development Society, Zoo Outreach Organization, or any of the partners. The journal, the publisher, the host, and the partners are not responsible for the accuracy of the political boundaries shown in the maps by the authors.

Partner



The Mohamed bin Zayed
SPECIES CONSERVATION FUND

Member



Publisher & Host





CURRENT STATUS OF BIRDS IN TENGCHONG SECTION OF GAOLIGONGSHAN NATIONAL NATURE RESERVE, CHINA

Xi Zheng¹ , Fei Li² , Zheng Bi³ , Xing-Chao Zhang⁴ , Ji-Guo Han⁵  & Bosco Pui Lok Chan⁶ 

ISSN 0974-7907 (Online)
ISSN 0974-7893 (Print)

PLATINUM
OPEN ACCESS



^{1,2,6} Kadoorie Conservation China, Kadoorie Farm & Botanic Garden, Lam Kam Road, Tai Po, Hong Kong SAR, China.
^{3,4,5} Yunnan Gaoligongshan National Nature Reserve (Tengchong Bureau), 157 Laifeng Avenue, Tengchong, Yunnan Province 679100, China.

¹ zhengxi@kfbg.org, ² lifei@kfbg.org, ³ 3338939005@qq.com, ⁴ 13577512661@139.com, ⁵ 3049539679@qq.com,
⁶ boscokf@kfbg.org (corresponding author)

Abstract: We summarised the results of a four-year ornithological survey in the Tengchong Section of Gaoligongshan National Nature Reserve and its immediate vicinity, and compiled an inventory of the present avifauna. In total, 387 bird species were recorded in Tengchong from 2014 to 2018, including 116 which were hitherto undocumented. The birds of Tengchong represented 48.9% of avifauna in Yunnan province, with a particularly rich elements of the Himalayan avifauna. This immense bird species richness suggests that Tengchong is an important site for the preservation of Asian montane forest birds. Although the current protected area system covered most of the intact forests in mid- to high-elevations, more conservation intervention should be allocated to lower elevation habitats below 2000m, which are largely outside the reserve boundaries and facing intensive development pressures.

Keywords: Conservation, eastern Himalaya, Hengduan Mountains, Kachin, new bird records, western Yunnan.

Chinese 摘要：2014 年至 2018 年针对高黎贡山国家级自然保护区保山市的腾冲片区及其周边开展了为期 4 年的鸟类考察工作，旨在更新及完善腾冲的本地鸟类名录。

考察共记录 387 种鸟类，其中 116 种在腾冲尚未有文献记载。腾冲的鸟类种数占云南鸟类总数的 48.9%，其中喜马拉雅区域的山地鸟类尤其丰富，凸显了腾冲对于亚洲山地鸟类保护的重要性。虽然目前中高海拔的原始森林生境大部分涵盖在保护区内，但低海拔 2000 米以下的生境大多位处保护区之外，人为干扰强烈，面临严峻的栖息地破坏威胁，亟需加强有关保护力度。

DOI: <https://doi.org/10.11609/jott.4440.11.11.14415-14433> | ZooBank: urn:lsid:zoobank.org:pub:DCB58763-BCBF-4211-B3EA-291DFA75465F

Editor: Hem S. Baral, Charles Sturt University, Sydney, Australia.

Date of publication: 12 September 2019 (online & print)

Manuscript details: #4440 | Received 27 July 2018 | Final received 02 August 2019 | Finally accepted 05 August 2019

Citation: Zheng, X., F. Li, Z. Bi, X.-C. Zhang, J.-G. Han & B.P.L. Chan (2019). Current status of birds in Tengchong Section of Gaoligongshan National Nature Reserve, China. *Journal of Threatened Taxa* 11(11): 14415–14433. <https://doi.org/10.11609/jott.4440.11.11.14415-14433>

Copyright: © Zheng et al. 2019. Creative Commons Attribution 4.0 International License. JoTT allows unrestricted use, reproduction, and distribution of this article in any medium by adequate credit to the author(s) and the source of publication.

Funding: This study is funded by Kadoorie Farm and Botanic Garden.

Competing interests: The authors declare no competing interests.

Author details: Xi ZHENG: Conservation Officer of Kadoorie Conservation China Department at Kadoorie Farm and Botanic Garden. FEI LI: Senior Conservation officer of Kadoorie Conservation China Department at Kadoorie Farm and Botanic Garden. ZHENG BI: Director of Gaoligongshan National Nature Reserve (Tengchong Bureau). XING-CHAO ZHANG: Technical Officer of Gaoligongshan National Nature Reserve (Tengchong Bureau). JI-GUO HAN: Technical Officer of Gaoligongshan National Nature Reserve (Tengchong Bureau). Bosco Pui Lok CHAN: Head of Kadoorie Conservation China Department at Kadoorie Farm and Botanic Garden.

Author contribution: BPLC conceived and designed the analysis. XZ performed the analysis and wrote the paper. All authors collected and contributed data.

Acknowledgements: We are grateful to the management of Gaoligongshan National Nature Reserve, particularly the Baoshan Administrative Bureau, for permission to conduct fieldwork and logistics support. We also thank the staff and wardens of the Nature Reserve, as well as colleagues from KFBG who helped in the surveys. Many friends participated in the fieldwork, notably Dr. John Mackinnon, Dr. Yang Liu, Jack Tordoff, Yat-tung Yu and Gao-feng Liao. Richard Lewthwaite and Shashank Salvi kindly assisted in species identification. We gratefully acknowledge the records submitted by Xiang-le Zeng, Xue-wen Peng and Xiang-yu Guan.



INTRODUCTION

The Gaoligongshan Mountains (hereafter GLGS) is a massive mountain range in the southwestern corner of China. It lies at the intersection of two major biogeographic regions – the Palearctic and Indo-Malayan realms. The southwest monsoon from the Indian Ocean brings plentiful rainfall, creating a perfect condition for the rich biodiversity and high endemism (Peng et al. 1980; Dumbacher et al. 2011). The unique biogeographic and geographic characteristics of GLGS support diverse avifauna, with elements from the Himalaya, southwestern China highlands (i.e., the Hengduan Mountains), and southeastern Asian ecoregions, which has been attracting early biologists and ornithologists since the 19th Century, and continues to this date. The southern section of GLGS is part of two endemic bird areas (Yunnan Mountains and eastern Himalaya, Stattersfield et al. 1998) and an Important Bird Area (CN244, BirdLife International 2018). For details on GLGS and Tengchong, see Chan et al. (2019, this issue).

The long history of ornithological work in this region began when British zoologist John Anderson first revealed the magnificence of GLGS to the scientific community after his expeditions to Yunnan in 1868 and 1875 (Anderson 1871a,b, 1876, 1878). Many naturalists continued to survey GLGS after Anderson's pioneering work; the most well-known is arguably the British botanist George Forrest who was commissioned by Lord Lionel Walter Rothschild to collect plant and animal specimens in western Yunnan. The extensive collections made by Forrest from 1904 to 1931 produced some important early literature on the avifauna of Yunnan (Rothschild 1926, 1927a,b,c). Modern ornithological research was primarily conducted by Chinese scientists, notably by various institutes under the Chinese Academy of Sciences (Peng et al. 1980; Yang et al. 1995; Tang et al. 1996; Yang & Yang 2004). International collaborations between research institutes also contributed invaluable information for further understanding of the avifauna in GLGS (Stotz et al. 2003; Dumbacher et al. 2011).

Since 2014, Kadoorie Farm & Botanic Garden and the Management Bureau of Tengchong section of Gaoligongshan National Nature Reserve co-organized a systematic biodiversity survey on major wildlife groups (Chan et al. 2019, this issue). The updated biodiversity inventories from our survey provide baseline data for future research and monitoring, and more importantly, lay the foundation for effective management of the Nature Reserve.

STUDY AREA AND METHODS

Tengchong section of Gaoligongshan National Nature Reserve (hereafter TC-GLGS) is on the western slope of the southern part of GLGS. Tengchong sits at the meeting point of subtropical lowlands and subalpine uplands, with an altitude range of 930m to 3,780m, creating distinct vegetation zones along the elevation gradient. According to Xue (1995), there are four major vegetation zones in TC-GLGS with two major altitudinal transitions between 1,800–2,000 m and near 2,800m, they are: (1) monsoon moist evergreen broadleaf forest below 2,000m; (2) mid-montane moist evergreen broadleaf forest between 1,800m and 2,800m; (3) subalpine hemlock-rhododendron mixed forest between 2,700m and 3,200m; and (4) subalpine bamboo-rhododendron thickets above 2,700m. Details can be found in Chan et al. (2019, present issue)

There are six management sections in TC-GLGS (Nos. 5–10 in Fig. 1); these made up the core of our survey sites. As the lower limit of the reserve boundary is at 1,900m, representative habitats in lower elevations outside TC-GLGS were also surveyed, these include Heshun Wetland near Tengchong Town, Beihai Marsh Nature Reserve, Longchuan River protected riparian forest under the jurisdiction of TC-GLGS (Nos. 1, 3 & 4 in Fig. 1), and better-quality riparian habitats along the Longchuan and Binglang rivers. Protected forests below 2,000m in Laifengshan National Forest Park and Fanshanchu State-owned Forest were also visited (Nos. 2 & 11 in Fig. 1).

Our fieldwork covered the full altitudinal range and annual seasonal cycle. A total of 334 man-days were spent conducting ornithological survey from April 2014 to May 2018 (dates shown in Table 1). Abundance of birds were recorded using standard line transect methods (Sutherland 2006). Survey were conducted during daytime with 8x32 Leica, 8x32 Olympus and 10x42 Minox binoculars, audio playbacks were used occasionally to increase the probability of detecting elusive species (e.g., frogmouth and pheasants). Ad hoc records of nocturnal birds encountered during mammal and herpetofauna night surveys were also included in the list.

Previous studies highlighted the importance of camera trapping as a complimentary survey method to obtain reliable avian diversity estimates, which is especially useful for detecting rare, elusive and/or large-sized terrestrial species (Dinata et al. 2008; Zhang et al. 2018). Camera traps were deployed extensively in TC-GLGS as part of a systematic mammal survey (Li et al.

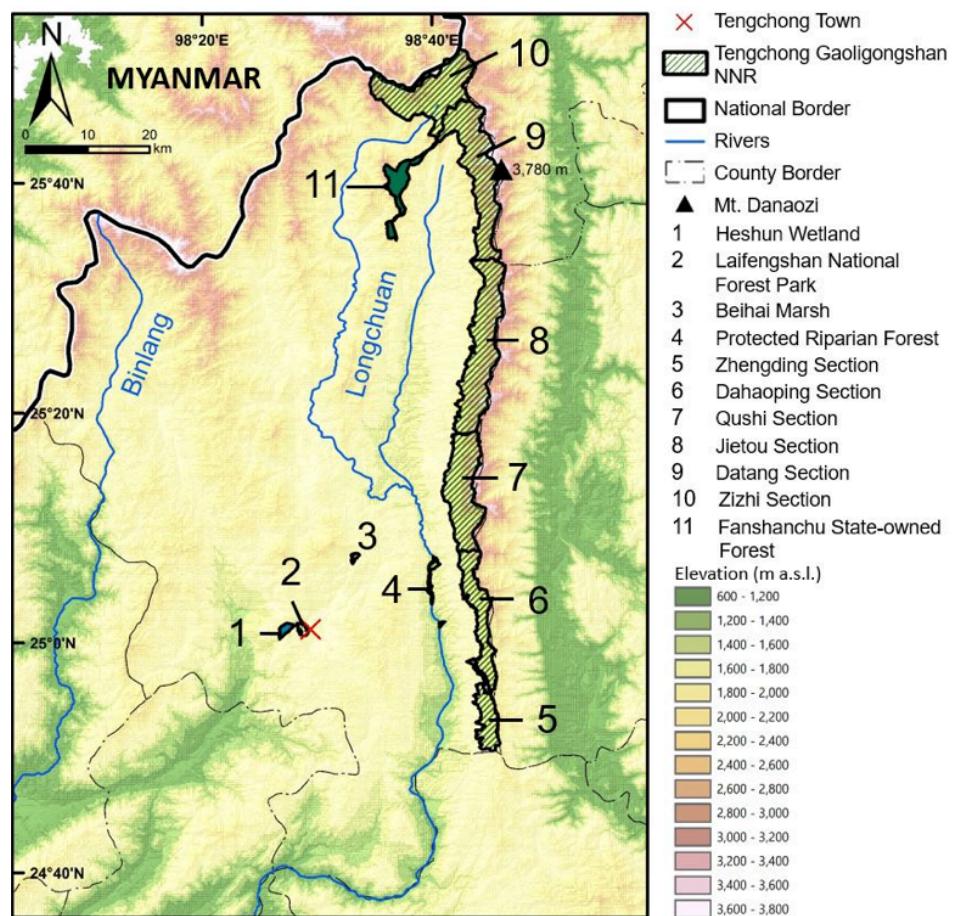


Figure 1. Tengchong, Yunnan Province, China with survey locations mentioned in text.

2019, this issue). A total of 147 camera-trap stations were installed in the study area, covering elevations between 1,515–3,350 m. A good number of bird photos generated from 14,814 trap-nights were obtained and these records were also included for bird list compilation.

TC-GLGS is part of the “birdwatching golden triangle” of western Yunnan, attracting many local and foreign birdwatchers. There is much online information on the avifauna of Tengchong written by traveling birdwatchers; however, many of these records are unauthenticated without detailed notes or associated photographs. Most of these birding records are not included in our list, unless the records are significant and verified by photographs and locality data.

RESULTS

A complete bird list for Tengchong based on our four-year survey is compiled in Appendix 1. Taxonomic arrangement and IUCN Red List status followed BirdLife

International (2017a); China Red List status followed Jiang et al. (2016).

In total, 387 species were recorded, representing 75 families in 20 orders. Detectability curve (Fig. 2) generated based on the survey data demonstrated the representativeness of our study. There are two species listed as Vulnerable by the IUCN Red List, nine species listed as Vulnerable or Endangered by the China Red List. We cross-checked our checklist with relevant literature on the avifauna of the region (Peng et al. 1980; Yang et al. 1995; Tang et al. 1996; Stotz et al. 2003; Yang & Yang 2004; Dumbacher et al. 2011; Liang et al. 2015), and 116 species were previously undocumented for Tengchong, including one new record for Yunnan, significantly updated the inventory of the local avifauna. The present bird list for Tengchong represents 48.9% of avian taxa that have been documented in Yunnan province (Yang et al. 1995; Yang & Yang 2004).

The richest bird families recorded in TC-GLGS are of robins and flycatchers (Muscicapidae, 43 species, 11.1% of total) (see Fig. 3). Another notable observation is the

Table 1. Bird survey sites and dates in and around Tengchong section of Gaoligongshan National Nature Reserve, Yunnan Province, China, 2014–2018.

Date	Survey areas*
24–30.iv.2014	2, 5, 7, 9
24–29.ix.2014	6, 9, 10
7–13.xii.2014	5, 6, 7, 10
10–15.iii.2015	8, 9
16–22.v.2015	7, 10
17–19.vii.2015	9, 10, 11
3–8.x.2015	5, 7, 10
14–16.x.2015	Binlang River and Longchuan River
27–29.xi.2015	Binlang River and Longchuan River
20–22.iii.2016	2, 3, 6
8–12.v.2016	2, 3, 4, 6, 9, 10
24–27.xi.2016	9, 10
20–22.ii.2017	1
24–26.iv.2017	10
4–10.v.2017	7, 10
25–26.vi.2017	4
21–25.xi.2017	10
24–26.v.2018	4, 5, 6, 9, 10

* Location numbers follows Figure 1.

richness of babblers. A total of 54 species of babblers were recorded during the survey period, this finding also consolidates the designation of GLGS as the center of speciation for Asian babblers (Wu et al. 2014).

SPECIES ACCOUNTS FOR SELECTED SPECIES

The annotated list below gives details of significant records, including species of conservation significance and those with range extensions.

Sclater's Monal *Lophophorus sclateri*

Listed as Vulnerable by the IUCN Red List, also legally protected in China. Recorded in bamboo-rhododendron thickets above 3,000m in Datang and Qushi sections. One male was recorded at 3,160m in Qushi section on 2 May 2018 (Image 1a). Sclater's Monal was mainly found in subalpine-alpine habitats and migrates to lower altitude in winter (Han et al. 2004; Luo et al. 2004). The inaccessibility of its preferred habitats may contribute to the low encounter rate. Previous study reported Sclater's Monal from all sections in TC-GLGS along the mountain ridge (Han et al. 2004), but according to local interviews poaching may have decimated some subpopulations in suitable habitats.

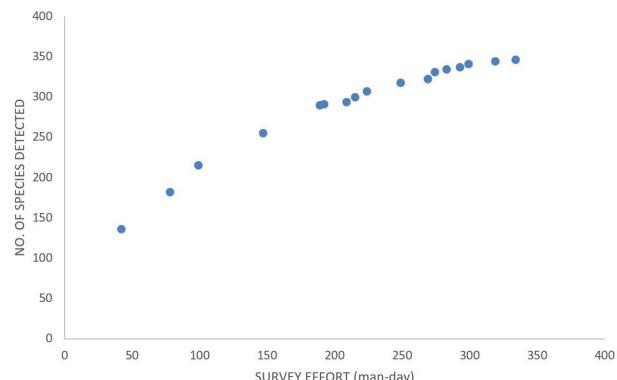


Figure 2. Detectability curve of our bird survey in and around Tengchong Section of Gaoligongshan National Nature Reserve, Yunnan Province, China, April 2014–May 2018.

Temminck's Tragopan *Tragopan temminckii*

Legally protected in China. Regularly recorded in mid to high-altitude moist evergreen broadleaf forest by both direct observations and camera traps in Qushi, Datang and Zizhi sections. Up to three individuals recorded together by camera trap in Qushi on 21 December 2014.

Mrs Hume's Pheasant *Syrmaticus humiae*

Listed as Near Threatened by the IUCN Red List, also legally protected in China. Recorded by camera traps from Datang and Qushi sections. A pair was observed crossing a quiet country road in an orchard-secondary forest mosaic at 1,700m at Dahaoping section. Birds were frequently seen by a reserve outpost at Qushi section since 2017. Interviews with local villagers suggest Mrs Hume's Pheasant is resilient to some degree of hunting and habitat degradation, and is usually found in disturbed habitats in lower elevations outside the reserve boundary. Its distribution range in Yunnan is restricted (Han 1997) and its habits make it vulnerable to habitat loss and poaching.

Lady Amherst's Pheasant *Chrysolophus amherstiae*

Legally protected in China. Camera-trapped in Datang section on 3 May 2016 and pair and singles were observed in Zizhi sections on 21 May 2015 and 21 August 2016 (Image 1b), respectively. Feathers of a male were collected in Zhengding section on 10 March 2015. Local villagers regard this species to be common in lower elevations around 2,000m and, as with Mrs Hume's Pheasant, prefer habitat mosaic of secondary growth.

Hodgson's Frogmouth *Batrachostomus hodgsoni*

Legally protected in China. One record in moist evergreen broadleaf forest in Zizhi Section on 11 May

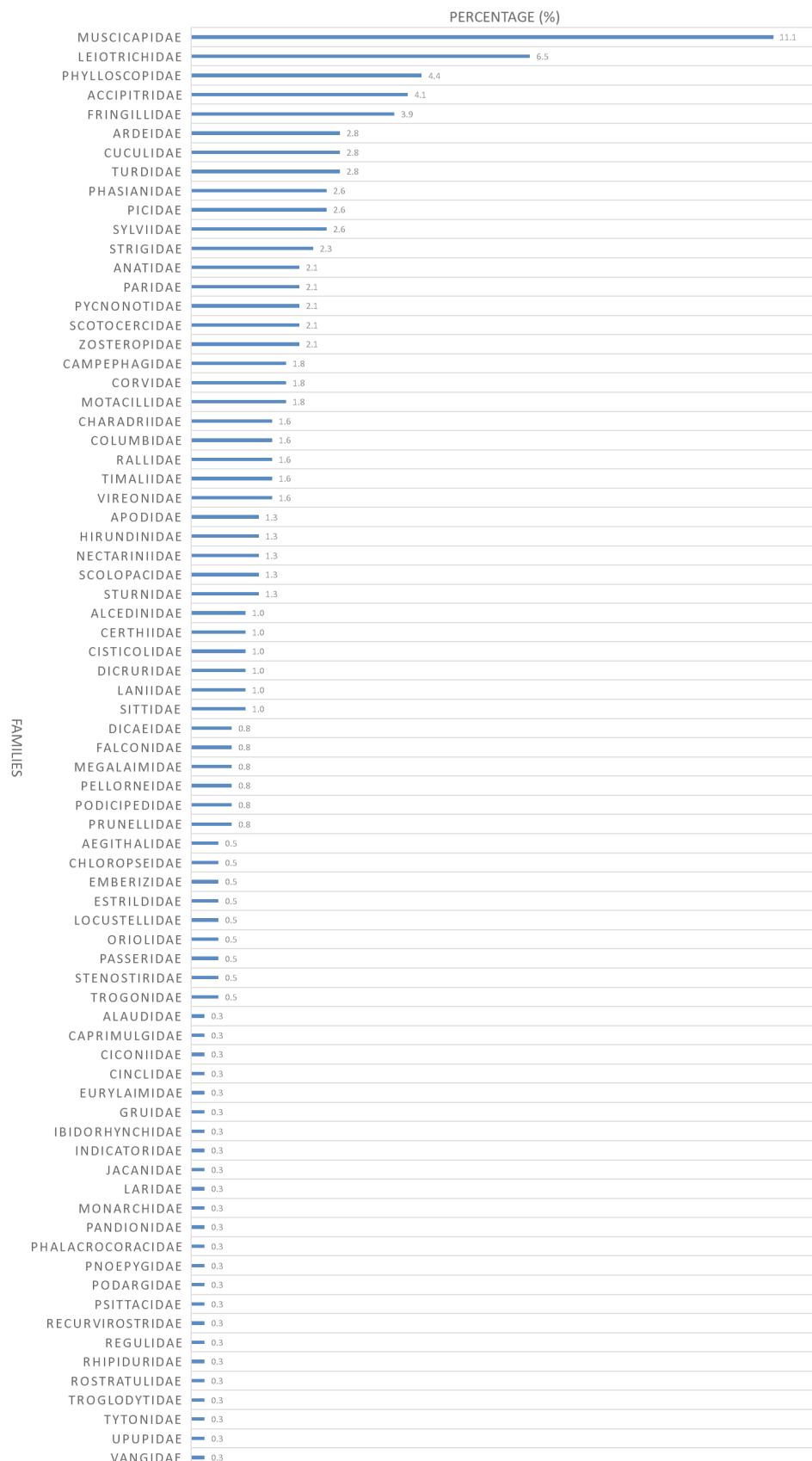


Figure 3. Taxonomic families recorded during our bird survey in and around Tengchong section of Gaoligongshan National Nature Reserve, Yunnan Province, China, April 2014-May 2018.

2016. The characteristic call of this species was recorded at 23.46h at 2,330m in moist evergreen broadleaf forest, which is higher than its normal elevation range at 300m to 1,900m (Holyoak 2018), it represented the northernmost record for China and the first record for TC-GLGS.

Asian Emerald Cuckoo *Chrysococcyx maculatus*

Recorded in Zhengding, Dahaoping, Qushi sections and Longchuan River protected riparian forest. This species may be a breeding visitor to Tengchong and courtship behaviours were observed in Qushi (28 April 2014) and Longchuan River protected riparian forest (10 May 2016).

Ibisbill *Ibidorhyncha struthersii*

Winter visitor recorded regularly in Zizhi section along an open stony river (11 December 2014, Image 1c; 28 November 2015). Seven individuals recorded in Jietou section on 18 February 2018. First record for TC-GLGS.

Northern Lapwing *Vanellus vanellus*

Listed as Near Threatened by the IUCN Red List. Winter visitor, a group of six individuals was spotted in Zizhi section on 12 December 2014. First record for TC-GLGS.

River Lapwing *Vanellus duvaucelii*

Listed as Near Threatened by the IUCN Red List. Recorded in a reservoir 8km north of Tengchong Town on 28 November 2015, also recorded in Jietou on 20 February 2018 (Image 1d). First record for TC-GLGS.

Himalayan Griffon *Gyps himalayensis*

Listed as Near Threatened by the IUCN Red List, also legally protected in China. The sighting of three high-flying birds at Qushi section over the main spine on 10 December 2014 is a first record for TC-GLGS. Noted by Liang et al. (2015) in nearby Lushui County.

Black Eagle *Ictinaetus malaiensis*

Legally protected in China. Regularly recorded in all sections of TC-GLGS. It is worth noting there was only one previous record from TC-GLGS (Yang et al. 1995). This forest-dependent species was historically rarely recorded in China, but are becoming regularly sighted in some provinces, despite the ongoing degradation of forest landscape outside protected areas. The apparent rarity of Black Eagle in China in the past was attributed to the species being overlooked or under-reported (Zhu et al. 2014).

Ward's Tropic *Harpactes wardi*

Listed as Near Threatened by the IUCN Red List. This elusive, forest-interior species is nowhere common, but audio and photographic records from Zizhi (19 May 2015), Datang (7 May 2016, 18 May 2018) and Jietou sections (8 April 2018) confirmed its presence in TC-GLGS. All records were from mid-montane moist evergreen broadleaf forest between 2,100m and 2,800m.

Yellow-rumped Honeyguide *Indicator xanthonotus*

Listed as Near Threatened by the IUCN Red List. Recorded at Qushi (28 April 2014) and Datang sections (13 March 2015, Image 1e) near cliffs in mid-montane moist evergreen broadleaf forest at 2,100–2,200 m. New record for TC-GLGS. Though not included in the GLGS list compiled by Dumbacher et al. (2011), specimens were collected from nearby Lushui County (Yang et al. 1995).

Grey-headed Parakeet *Psittacula finschii*

Listed as Near Threatened by the IUCN Red List, also legally protected in China. Population and distribution range of this species has declined in China in recent decades. One and three birds were observed/photographed at Datang section on 26 June 2017 and 6 June 2018, respectively. A flock of more than 50 individuals was found feeding on pine cones along the Longchuan River at 1,350m at Dahaoping on 25 June 2017. It appears to be nomadic and visit Tengchong only in the summer months, as records are few but many villages reported the species.

Fire-tailed Myzornis *Myzornis pyrrhura*

Fire-tailed Myzornis breeds in high-altitude bamboo-rhododendron forest (Liang et al. 2017) and migrate to lower elevations in winter. Birds were often seen at 3,160m at Qushi section (Image 1f). This species was also encountered twice in Zizhi section: at 2,900m on 20 May 2015 in subalpine hemlock-rhododendron mixed forest and in moist evergreen broadleaf forest at 2,480m on 25 Nov 2017. On the latter occasion, it was seen feeding on moss-covered tree trunk, aggressively chasing off a Green-tailed Sunbird *Aethopyga nipalensis* from the feeding site. First record for TC-GLGS.

Bar-winged Wren-babbler *Spelaeornis troglodytoides* Two individuals were observed in thick undergrowth of moist evergreen broadleaf forest at 2,740m at Zizhi section on 22 November 2017.

Slender-billed Scimitar-babbler *Pomatorhinus superciliaris*

Recorded at 2,900m in Zizhi section on 29 September



Image 1. Birds recorded in the Tengchong Section of Gaoligongshan National Nature Reserve in 2014–2018. a—Sclater's Monal *Lophophorus sclateri* | b—Lady Amherst's Pheasant *Chrysolophus amherstiae* | c—Ibisbill *Ibidorhyncha struthersii* | d—River Lapwing *Vanellus duvaucelii* | e—Yellow-rumped Honeyguide *Indicator xanthonotus* | f—Fire-tailed Myzornis *Myzornis pyrrhura* | g—Slender-billed Scimitar-babbler *Pomatorhinus superciliaris* | h—Himalayan Cutia *Cutia nipalensis*.

2014 and 8 May 2017. Ten birds were seen at 2,150m in Qushi section on 16 March 2018 (Image 1g).

Yellow-throated Fulvetta *Schoeniparus cinereus*

Recorded at Jietou section on 11 March 2015. Stotz (2003) also recorded this species in Datang section.

Himalayan Cutia *Cutia nipalensis*

A party of seven was observed feeding on nectar of the tree *Rhodoleia forrestii* at 2,100m in Datang section on 13 March 2015 (Image 1h). The species was frequently seen at 2,150m in Qushi section.

Yunnan Nuthatch *Sitta yunnanensis*

Listed as Near Threatened by the IUCN Red List. This Chinese endemic was recorded in Jietou section on 10 March 2015.

Purple Cochoa *Cochoa purpurea*

One sub-adult recorded in Zizhi section at 2,900m on 7 Oct 2015 in subalpine hemlock-rhododendron mixed forest. First record for TC-GLGS.

Common Chaffinch *Fringilla coelebs*

One individual photographed in subalpine bamboo-rhododendron thickets at 3,287m on 13 November 2016 at Qushi section, which represented the first record of this species in Yunnan (Zheng et al. 2017).

DISCUSSION

The vast expanse of mid-montane moist evergreen broadleaf forest protected by TC-GLGS harbours the highest bird species richness with the highest conservation value; a pattern consistent with a study conducted in the adjacent Lushui section of Gaoligongshan National Nature Reserve (Liang et al. 2015). In the nearby Hkakabo Razi region of northern Kachin State, Myanmar, Rappole et al. (2011) recorded 413 bird species at elevations ranging from 500 to 3,000 m. While our bird list of 387 species from TC-GLGS is comparable in species richness, it is obvious our current bird list lacks many species/groups typical of lower elevations; for example, the more tropical galliformes, raptors, woodpeckers and hornbills recorded from the 1,000–2,000-m hill forest belt in Rappole et al. (2011) are missing from TC-GLGS. In Tengchong, most forests below 2,200m are excluded from the current protected area network; the under-representation of lower elevation habitats undermines the potential of

Tengchong to support a full community of avifauna, to the detriment of threatened species which prefer lower elevations such as Mrs Hume's Pheasant and River Lapwing. At altitudes above 2,800m, upland species like Sclater's Monal *Lophophorus sclateri* and Fire-tailed Myzornis *Myzornis pyrrhura* face less direct threats from anthropogenic activities due to the remoteness of their habitats and the fact that high elevation areas are also the core zone of the Reserve. Climate change, however, will likely disrupt the altitudinal zonation of montane communities. The possible range contractions induced by climate change will put high altitude species under tremendous pressure (Gasner et al. 2010; Flousek et al. 2015). The current bird species richness and populations need to be monitored closely to predict the impacts of climate change on the bird fauna of GLGS.

TC-GLGS have a long history of human habitation, the inevitable habitat degradation as well as rampant hunting in the past all contributed to the loss of some biodiversity elements. The nature reserve network is, currently, the most important approach in protecting natural forests and biodiversity in Yunnan; however, it should be noted that the existing protected area system cannot effectively preserve all sites of conservation significance. Although large areas of intact mid- to upper-montane forests are currently protected, most lowland areas are devoted to settlements and agriculture. The rapidly growing human population continues to put pressure on the low-elevation ecosystems and biodiversity.

Despite the intensity of our field surveys, some species of conservation significance were not recorded by us: Yellow-breasted Bunting *Emberiza aureola* was a winter visitor to TC-GLGS and noted as "common" by Tang et al. (1996). It has been up listed to Critically Endangered in 2017 because of the rapid decline of its global population (BirdLife International 2017b). Absence of this species during surveys may reflect its current conservation status, but may also reflect our lack of survey coverage in farmland habitat; a dedicated survey should be conducted in the future to gather more information about the status of Yellow-breasted Bunting as well as other bunting species in Tengchong, as the group as a whole is under sharp decline (Kamp et al. 2015). Golden Eagle *Aquila chrysaetos* were once observed in large numbers (Rothschild 1926), but its population dropped rapidly since the 1960s (Yang et al. 1995). Red-headed Vulture *Sarcogyps calvus* was reported from Tengchong by Yang et al. (1995), but has not been reported in Yunnan since the 1980s. Global population of the Red-headed Vulture has been in precipitous decline, and is listed as Critically Endangered

(Birdlife International 2017c). A juvenile White-bellied Heron *Ardea insignis* was found in nearby Lushui County, around 20km north of Tengchong, in 2014 (Han et al. 2015), suggesting Tengchong could be a potential distribution area for this Critically Endangered species. We have organized target surveys covering suitable habitats in major river basins in Tengchong, but no White-bellied Heron was encountered despite positive feedbacks by interviews and good habitats available. The Green Peafowl *Pavo muticus* occurred in Tengchong before the 1980s (Cheng 1987), but has not been recorded since (Wen et al. 1995); we found no trace of the species during the survey, nor any local reports.

CONCLUSIONS

With 387 documented avian taxa in our survey, TC-GLGS has immense bird species richness, especially for a temperate region. It is an important site for the preservation of Asian montane forest birds, and an integral part of the larger eastern Himalaya region that is a center of bird endemism and evolution (Dumbacher et al. 2011; Renner & Rappole 2011).

More conservation effort should be allocated to lower elevations below 2,000m, which face intensive anthropogenic pressure for land use change, and is largely outside the reserve boundaries. The secondary forests and wetlands at lower elevations could increase landscape diversity and partially offset species loss from primary forests (Wang et al. 2016). There should be active collaboration with the local communities in developing restoration projects to connect these habitat fragments with TC-GLGS, which is in line with the Chinese government's "Ecological Civilization" goal (Xi 2017). With support from ecological compensation project like "Mechanism of Compensation for Ecological Protection" and other restoration projects, these pockets of low-elevation forests in community-owned land could provide "stepping stones" for the recovering wildlife population in the region (Hua et al. 2017).

REFERENCES

Anderson, J. (1871a). A report on the expedition to western Yunan via Bhamo. Office of the Superintendent of Government Printing, Calcutta, India, 458pp.

Anderson, J. (1871b). On eight new species of birds from western Yunan, China. *Proceedings of the Zoological Society of London* 1871:211–215.

Anderson, J. (1876). *Mandalay to Momien: A Narrative of the Two Expeditions to Western China of 1868 and 1875, Under Colonel Edward B. Sladen and Colonel Horace Browne*. MacMillan & Co., London, 479pp.

Anderson, J. (1878). *Anatomical and zoological researches: Comprising an account of the zoological results of the two expeditions to western Yunnan in 1868 and 1875; and a monograph of the two cetacean genera, *Platanista* and *Orcella**. B. Quaritch, London. 2 vols., xxv-l-985 pp., xi-l-84 pp.

BirdLife International (2017a). Handbook of the Birds of the World and BirdLife International digital checklist of the birds of the world. Version 9.1. Downloaded on 12 October 2017. Available at: http://datazone.birdlife.org/userfiles/file/Species/Taxonomy/BirdLife_Checklist_Version_91.zip

BirdLife International (2017b). *Emberiza aureola*. In: IUCN 2017. 2017 IUCN Red List of Threatened Species. Downloaded on 18 April 2018. Available at: <https://doi.org/10.2305/IUCN.UK.2017-3.RLTS.T22720966A119335690.en>

BirdLife International (2017c). *Sarcogyps calvus*. In: IUCN 2017. 2017 IUCN Red List of Threatened Species. Downloaded on 04 May 2018. Available at: <https://doi.org/10.2305/IUCN.UK.2017-3.RLTS.T22695254A118371885.en>

BirdLife International (2018). Important Bird Areas factsheet: Gaoligong Shan Nature Reserve (southern section). Downloaded on 26 April 2018.

Chan, B.P.L., Z. Bi & S.Z. Duan (2019). Introduction to a four-year biodiversity survey of Tengchong Section of Gaoligongshan National Nature Reserve, in the footsteps of pioneering naturalists in western Yunnan, China. *Journal of Threatened Taxa* 11(11): 14391–14401. <https://doi.org/10.1111/jott.04438>

Dinata, Y., A. Nugroho, I. Achmadhaidir & M. Linkie (2008). Camera trapping rare and threatened avifauna in west-central Sumatra. *Bird Conservation International* 18: 30–37.

Dumbacher, J.P., J. Miller, M.E. Flannery & X. Yang (2011). Avifauna of the Gaoligong Shan Mountains of western China: a hotspot of avian species diversity. *Ornithological Monographs* 70: 30–63.

Flousek, J., T. Telensky, J. Hanzelka & J. Reif (2015). Population trends of central European montane birds provide evidence for adverse impacts of climate change on high-altitude species. *PLoS ONE* 10: 1–14.

Gasner, M.R., J.E. Jankowski, A.L. Ciecka, K.O. Kyle & K.N. Rabenold (2010). Projecting the local impacts of climate change on a Central American montane avian community. *Biological Conservation* 143: 1250–1258.

Han, L. (1997). The distribution and habitat selection of the Hume's pheasant in Yunnan *Syrmaticus humiae*. *Chinese Biodiversity* 5: 185–189. (in Chinese with English abstract)

Han, L., C. He, B. Wang, Q. Wei, X. Luo, X. Wu & M. Wei (2015). The Discovery of White-bellied Heron in Yunnan. *Sichuan Journal of Zoology*: <http://www.scdwzz.com.cn/newsview.aspx?newsid=1790&type=3>. Accessed on 22 October 2015. (in Chinese)

Han, L., S. Huang, X. Luo & H. Yang (2004). The distribution and conservation of Slater's monal in Yunnan. *Biodiversity Science* 12: 523–527. (in Chinese with English abstract)

Hua, F., J. Xu. & D.S. Wilcove (2017). A New Opportunity to Recover Native Forests in China. *Conservation Letters* 11: 1–8.

Holyoak, D.T. (2018). Hodgson's Frogmouth (*Batrachostomus hodgsonii*). In: del Hoyo, J., A. Elliott, J. Sargatal, D.A. Christie & E. de Juana (eds.). *Handbook of the Birds of the World Alive*. Lynx Edicions, Barcelona. (retrieved from <https://www.hbw.com/node/55149> on 17 May 2018).

Jiang, Z., J. Jiang, Y. Wang, E. Zhang, Y. Zhang, L. Li, F. Xie, B. Cai, L. Cao, G. Zheng, L. Dong, Z. Zhang, P. Ding, Z. Luo, C. Ding, Z. Ma, S. Tang, W. Cao, C. Li, H. Hu, Y. Ma, Y. Wu, Y. Wang, K. Zhou, S. Liu, Y. Chen, J. Li, Z. Feng, Y. Wang, B. Wang, X. Li, X. Song, L. Cai, C. Zang, Y. Zeng, Z. Meng, H. Fang & X. Ping (2016). Red List of China's Vertebrates. *Biodiversity Science* 24: 500–551. (in Chinese with English abstract)

Kamp, J., S. Oppel, A.A. Ananin, Y.A. Durnev, S.N. Gashev, N. Holzel, A.L. Mishchenko, J. Pessa, S.M. Smirenski, E.G. Strelnikov, S. Timonen, K. Wolanska & S. Chan (2015). Global population collapse

in a superabundant migratory bird and illegal trapping in China. *Conservation Biology* 29: 1684–1694.

Li, F., X-Y. Huang, X-C. Zhang, X-XZ, J-h Y & B.P.L. Chan (2019). Mammals of Tengchong Section of Gaoligongshan National Nature Reserve in Yunnan Province, China. *Journal of Threatened Taxa* 11(11): 14402–14414. <https://doi.org/10.11609/jott.4439.11.11.14402-14414>

Liang, D., G. Gao, L. Han. & X. Luo (2017). Breeding Biology of Fire-Tailed Myzornis (*Myzornis pyrrhura*) in an Alpine Environment in southwestern China. *Wilson Journal of Ornithology* 129: 568–575.

Liang, D., G. Gao, B. Wang, X.W. Wang, Y.X. Chan, X.R. Wu, C. Zhao, D.M. Jiang, L.X. Han & X. Luo (2015). The diversity and vertical distribution of the birds in middle Gaoligong Mountain, Yunnan. *Sichuan Journal of Zoology* 34(6): 930–940. (in Chinese with English abstract)

Luo, X., L. Han & H. Ai (2004). Preliminary Report on the Movement and Habitat Preference of Sclater's Monal at Mt. Gaoligongshan in Winter. *Zoological Research* 25: 48–52. (in Chinese with English abstract)

Peng, Y., T. Wei, L. Yang & G. Liu (1980). *Investigation Reports on Vertebrates in Gaoligong Mountains, Yunnan Province, vol. 2: Birds.* Sciences Press, Beijing. (in Chinese)

Rappole, J.H., T. Aung, P.C. Rasmussen & S.C. Renner (2011). Ornithological Exploration in the Southeastern Sub-Himalayan Region of Myanmar. *Ornithological Monographs* 70: 10–29.

Renner, S.C. & J.H. Rappole. (2011). Bird Diversity, Biogeographic Patterns, and Endemism of the Eastern Himalayas and Southeastern Sub-Himalayan Mountains. *Ornithological Monographs* 70: 153–166.

Rothschild, L.W. (1926). On the avifauna of Yunnan, with critical notes. *Novitates Zoologicae* 33: 189–343.

Rothschild, L.W. (1927a). Supplemental notes on the avifauna of Yunnan. *Novitates Zoologicae* 33: 395–400.

Rothschild, L.W. (1927b). Corrections and criticisms to the article on the avifauna of Yunnan. *Novitates Zoologicae* 33: 398–400.

Rothschild, L.W. (1927c). Supplement to the avifauna of Yunnan. *Novitates Zoologicae* 34: 39–45.

Sutherland, W.J. (Ed.) (2006). *Ecological census techniques: a handbook, 2nd edition.* Cambridge University Press, Cambridge, 432pp.

Stattersfield, A.J., M.J. Crosby, A.J. Long & D.C. Wege (1998). *Endemic Bird Areas of the World. Priorities for Biodiversity Conservation.* BirdLife Conservation Series 7. BirdLife International, Cambridge, 816pp.

Stotz, D.F., E.J. Harris, D.K. Moskovits, K. Hao, S. Yi & G.W. Adelmann (eds.) (2003). *China: Yunnan, Southern Gaoligongshan. Rapid Biological Inventories, No.4.* The Field Museum, Chicago, 144pp.

Tang, C., Y. Xu & L. Yang (1996). *Birds of the Hengduan Mountains Region.* Sciences Press, Beijing, 546pp. (in Chinese)

Wang, L., S.S. Young, W. Wang, G. Ren, W. Xiao, Y. Long, J. Li. & J. Zhu (2016). Conservation priorities of forest ecosystems with evaluations of connectivity and future threats: implications in the eastern Himalaya of China. *Biological Conservation* 195: 128–135.

Wen, X., X. Yang, L. Han, L. Yang & W. Wang (1995). Investigations on the current status of the distribution of Green Peafowl in China. *Chinese Biodiversity* 3: 46–51. (in Chinese with English abstract)

Wu, Y.J., R.K. Colwell, N.J. Han, R.Y. Zhang, W.J. Wang, Q. Quan, C.L. Zhang, G. Song, Y.H. Qu & F.M. Lei (2014). Understanding historical and current patterns of species richness of babblers along a 5000-m subtropical elevational gradient. *Global Ecology and Biogeography* 23: 1167–1176.

Xi, J. (2017). Secure a Decisive Victory in Building a Moderately Prosperous Society in All Respects and Strive for the Great Success of Socialism with Chinese Characteristics for a New Era. Report at 19th National Congress of the Communist Party of China. Downloaded on 11 April 2018. Available at http://www.xinhuanet.com/english/download/Xi_Jinping's_report_at_19th_CPC_National_Congress.pdf

Xue, J.R. (ed.) (1995). *Gaoligong Mountain National Nature Reserve.* China Forestry Publishing House, Beijing, 395pp. (in Chinese)

Yang, L., X. Wen, L. Han, X. Yang, W. Shi & S. Wang (1995). *The Avifauna of Yunnan China, vol. 1: Non-Passerines.* Yunnan Science and Technology Press, Kunming, China, 673pp. (in Chinese)

Yang, L. & X. Yang. (2004). *The Avifauna of Yunnan China, vol. 2: Passeriformes.* Yunnan Science and Technology Press, Kunming, China, 1056pp. (in Chinese)

Zhang, Q.W., Y.N. Gong, X.J. Song, X.C. Wang, C.T. Yang, Z.F. Shu & F.S. Zou (2018). Comparing the effectiveness of camera trapping to traditional methods for biodiversity surveys of forest birds. *Biodiversity Science* 26(3): 229–237.

Zheng, X., S. Li, X. Huang & F. Li (2017). Common Chaffinch *Fringilla coelebs* found in Tengchong, Yunnan. *Chinese Journal of Zoology* 52: 496. (in Chinese)

Zhu, L., X. Yang, G. Hao, Q. Huang, T. Liu, Z. Dai, Q. Wei, R.W. Lewthwaite & Y. Sun (2014). A review of the distribution of Black Eagle *Ictinaetus malaiensis* in mainland China. *Forktail* 30: 45–49.

Appendix 1. Birds recorded from Tengchong section of Gaoligongshan, Yunnan Province, China, 2014–2018.

Conservation Status: 1 = IUCN Red List status, 2 = China Red List status (EN = Endangered, VU = Vulnerable, NT = Near Threatened, LC = Least Concern, DD = Data Deficient), 3 = National Key Protected Wild Animals status (I = Class I, II = Class II).

First Record: YN = First record for Yunnan, TC = First record for Tengchong;

Survey Locations: A = Heshun Wetland, B = Laifengshan National Forest Park, C = Beihai Marsh, D = Protected Riparian Forest, E = Zhengding, F = Dahaoping, G = Qushi, H = Jietou, I = Datang, J = Zizhi, K = Fanshanchu State-owned Forest, L = Other sites in Tengchong.

Common name	Scientific name	Conservation status			First record	Survey locations
		1	2	3		
Hill Partridge	<i>Arborophila torqueola</i>	LC	LC	-	-	G,H,I,J,L
Rufous-throated Partridge	<i>Arborophila rufogularis</i>	LC	LC	-	TC	D,F
Mountain Bamboo-partridge	<i>Bambusicola fytchii</i>	LC	LC	-	-	E,G,I,J
Sclater's Monal	<i>Lophophorus sclateri</i>	VU	EN	I	-	G
Temminck's Tragopan	<i>Tragopan temminckii</i>	LC	NT	II	-	G,I,J
Blood Pheasant	<i>Ithaginis cruentus</i>	LC	NT	II	TC	I
Mrs Hume's Pheasant	<i>Syrmaticus humiae</i>	NT	VU	I	-	F,G,I
Lady Amherst's Pheasant	<i>Chrysolophus amherstiae</i>	LC	NT	II	-	I,J,L
Common Pheasant	<i>Phasianus colchicus</i>	LC	LC	-	-	E,J,L
Silver Pheasant	<i>Lophura nycthemera</i>	LC	LC	II	-	E,F,H,I,J,L
Ruddy Shelduck	<i>Tadorna ferruginea</i>	LC	LC	-	-	A,C,J,L
Common Pochard	<i>Aythya ferina</i>	VU	LC	-	TC	C
Ferruginous Duck	<i>Aythya nyroca</i>	NT	NT	-	TC	C
Garganey	<i>Spatula querquedula</i>	LC	LC	-	-	C
Gadwall	<i>Mareca strepera</i>	LC	LC	-	TC	C
Indian Spot-billed Duck	<i>Anas poecilorhyncha</i>	LC	-	-	-	A,C,J,L
Mallard	<i>Anas platyrhynchos</i>	LC	LC	-	TC	J,L
Common Teal	<i>Anas crecca</i>	LC	LC	-	-	C
Little Grebe	<i>Tachybaptus ruficollis</i>	LC	LC	-	-	A,L
Great Crested Grebe	<i>Podiceps cristatus</i>	LC	LC	-	TC	L
Black-necked Grebe	<i>Podiceps nigricollis</i>	LC	LC	-	TC	L
Speckled Woodpigeon	<i>Columba hodgsonii</i>	LC	LC	-	-	G,J
Ashy Woodpigeon	<i>Columba pulchricollis</i>	LC	LC	-	TC	I
Oriental Turtle-dove	<i>Streptopelia orientalis</i>	LC	LC	-	-	B,D,F,H,I,J,L
Red Turtle-dove	<i>Streptopelia tranquebarica</i>	LC	LC	-	-	I
Eastern Spotted Dove	<i>Spilopelia chinensis</i>	LC	LC	-	-	H,I,J,L
Wedge-tailed Green-pigeon	<i>Treron sphenurus</i>	LC	NT	II	-	G,I,J
Hodgson's Frogmouth	<i>Batrachostomus hodgsoni</i>	LC	DD	II	TC	J
Grey Nightjar	<i>Caprimulgus jotaka</i>	LC	-	II	-	F,G,J
White-throated Needletail	<i>Hirundapus caudacutus</i>	LC	LC	-	-	J
Himalayan Swiftlet	<i>Aerodramus brevirostris</i>	LC	NT	-	-	G,I,J,K
Asian Palm-swift	<i>Cypsiurus balasiensis</i>	LC	LC	-	-	J,L
Pacific Swift	<i>Apus pacificus</i>	LC	LC	-	TC	E,G,H,J
House Swift	<i>Apus nipalensis</i>	LC	LC	-	-	B,D,H,L
Green-billed Malkoha	<i>Phaenicophaeus tristis</i>	LC	LC	-	-	D,F,F
Western Koel	<i>Eudynamys scolopaceus</i>	LC	LC	-	-	G,I,J
Asian Emerald Cuckoo	<i>Chrysococcyx maculatus</i>	LC	NT	-	-	D,E,G
Plaintive Cuckoo	<i>Cacomantis merulinus</i>	LC	LC	-	-	G,J
Fork-tailed Drongo-cuckoo	<i>Surniculus dicruroides</i>	LC	LC	-	-	D,F,J

Common name	Scientific name	Conservation status			First record	Survey locations
		1	2	3		
Large Hawk-cuckoo	<i>Hierococcyx sparverioides</i>	LC	LC	-	-	B,D,E,F,G,H,I,J,L
Whistling Hawk-cuckoo	<i>Hierococcyx nisicolor</i>	LC	LC	-	TC	D
Indian Cuckoo	<i>Cuculus micropterus</i>	LC	LC	-	TC	D,G,J
Common Cuckoo	<i>Cuculus canorus</i>	LC	LC	-	-	D,E,F,G,I,J
Oriental Cuckoo	<i>Cuculus saturatus</i>	LC	LC	-	-	D,G,I,J
Lesser Cuckoo	<i>Cuculus poliocephalus</i>	LC	LC	-	-	G,J
Ruddy-breasted Crake	<i>Zapornia fusca</i>	LC	NT	-	-	L
Black-tailed Crake	<i>Zapornia bicolor</i>	LC	LC	II	-	F,J
White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	LC	LC	-	-	A,C,D,H,I,J
Purple Swamphen	<i>Porphyrio porphyrio</i>	LC	VU	-	-	C
Common Moorhen	<i>Gallinula chloropus</i>	LC	LC	-	-	A,C,L
Common Coot	<i>Fulica atra</i>	LC	LC	-	TC	J,L
Common Crane	<i>Grus grus</i>	LC	NT	II	TC	J,L
Black Stork	<i>Ciconia nigra</i>	LC	VU	I	-	J,L
Yellow Bittern	<i>Ixobrychus sinensis</i>	LC	LC	-	TC	C
Cinnamon Bittern	<i>Ixobrychus cinnamomeus</i>	LC	LC	-	-	I,L
Black-crowned Night-heron	<i>Nycticorax nycticorax</i>	LC	LC	-	-	L
Green-backed Heron	<i>Butorides striata</i>	LC	LC	-	-	A,L
Chinese Pond-heron	<i>Ardeola bacchus</i>	LC	LC	-	-	A,J,L
Cattle Egret	<i>Bubulcus ibis</i>	LC	LC	-	-	C,D,E,H,J,K,L
Grey Heron	<i>Ardea cinerea</i>	LC	LC	-	TC	L
Purple Heron	<i>Ardea purpurea</i>	LC	LC	-	TC	C
Great White Egret	<i>Ardea alba</i>	LC	LC	-	TC	C,D
Intermediate Egret	<i>Ardea intermedia</i>	LC	LC	-	TC	C,J
Little Egret	<i>Egretta garzetta</i>	LC	LC	-	-	C,D,I,J,L
Great Cormorant	<i>Phalacrocorax carbo</i>	LC	LC	-	-	A,J,L
Ibisbill	<i>Ibidorhyncha struthersii</i>	LC	NT	-	TC	H,J
Black-winged Stilt	<i>Himantopus himantopus</i>	LC	LC	-	-	L
Long-billed Plover	<i>Charadrius placidus</i>	LC	NT	-	-	J
Little Ringed Plover	<i>Charadrius dubius</i>	LC	LC	-	TC	L
Northern Lapwing	<i>Vanellus vanellus</i>	NT	LC	-	TC	J
River Lapwing	<i>Vanellus duvaucelii</i>	NT	NT	-	TC	L,H
Grey-headed Lapwing	<i>Vanellus cinereus</i>	LC	LC	-	-	J,L
Red-wattled Lapwing	<i>Vanellus indicus</i>	LC	DD	-	-	L
Greater Painted-snipe	<i>Rostratula benghalensis</i>	LC	LC	-	-	L
Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i>	LC	NT	-	TC	C
Eurasian Woodcock	<i>Scolopax rusticola</i>	LC	LC	-	-	F,J
Common Snipe	<i>Gallinago gallinago</i>	LC	LC	-	TC	L
Red-necked Phalarope	<i>Phalaropus lobatus</i>	LC	LC	-	TC	L
Common Sandpiper	<i>Actitis hypoleucos</i>	LC	LC	-	-	J,L
Green Sandpiper	<i>Tringa ochropus</i>	LC	LC	-	-	H,J,L
Black-headed Gull	<i>Larus ridibundus</i>	LC	LC	-	TC	L
Eastern Grass-owl	<i>Tyto longimembris</i>	LC	DD	-	TC	G,L
Collared Owlet	<i>Glaucidium brodiei</i>	LC	LC	II	TC	E,F,H,I,J,L

Common name	Scientific name	Conservation status			First record	Survey locations
		1	2	3		
Asian Barred Owlet	<i>Glaucidium cuculoides</i>	LC	LC	II	TC	D,F,H,J
Collared Scops-owl	<i>Otus lettia</i>	LC	LC	II	-	F,G
Mountain Scops-owl	<i>Otus spilocephalus</i>	LC	NT	II	TC	F,I,J,L
Oriental Scops-owl	<i>Otus sunia</i>	LC	LC	II	TC	J
Brown Wood-owl	<i>Strix leptogrammica</i>	LC	NT	II	-	B,G,J
Himalayan Owl	<i>Strix nivicolum</i>	LC	-	II	-	F,H,J
Spot-bellied Eagle-owl	<i>Bubo nipalensis</i>	LC	NT	II	TC	I
Tawny Fish-owl	<i>Ketupa flavipes</i>	LC	EN	II	TC	I
Osprey	<i>Pandion haliaetus</i>	LC	NT	II	TC	J
Black-winged Kite	<i>Elanus caeruleus</i>	LC	NT	II	-	F,H,L
Oriental Honey-buzzard	<i>Pernis ptilorhynchus</i>	LC	NT	II	-	D,F,G,I,J
Jerdon's Baza	<i>Aviceda jerdoni</i>	LC	NT	II	TC	G
Crested Serpent-eagle	<i>Spilornis cheela</i>	LC	NT	II	-	D,F,H,I,J
Himalayan Griffon	<i>Gyps himalayensis</i>	NT	NT	II	TC	G
Mountain Hawk-eagle	<i>Nisaetus nipalensis</i>	LC	NT	II	-	G,J
Black Eagle	<i>Ictinaetus malaiensis</i>	LC	VU	II	-	E,F,G,H,I,J,K,L
Bonelli's Eagle	<i>Aquila fasciata</i>	LC	VU	II	TC	I
Hen Harrier	<i>Circus cyaneus</i>	LC	NT	II	-	J,L
Pied Harrier	<i>Circus melanoleucos</i>	LC	NT	II	-	C,H
Crested Goshawk	<i>Accipiter trivirgatus</i>	LC	NT	II	-	B,D,F,L
Besra	<i>Accipiter virgatus</i>	LC	LC	II	-	G,H,I
Northern Goshawk	<i>Accipiter gentilis</i>	LC	NT	II	TC	G
Black Kite	<i>Milvus migrans</i>	LC	LC	II	-	L
Grey-faced Buzzard	<i>Butastur indicus</i>	LC	NT	II	TC	G,J
Himalayan Buzzard	<i>Buteo reectus</i>	LC	-	II	-	E,H,J,L
Red-headed Trogon	<i>Harpactes erythrocephalus</i>	LC	NT	-	-	I,J
Ward's Trogon	<i>Harpactes wardi</i>	NT	NT	-	TC	H,I,J
Common Hoopoe	<i>Upupa epops</i>	LC	LC	-	-	F,J
Common Kingfisher	<i>Alcedo atthis</i>	LC	LC	-	-	A,H,I,J,L
Crested Kingfisher	<i>Megaceryle lugubris</i>	LC	LC	-	-	G
White-breasted Kingfisher	<i>Halcyon smyrnensis</i>	LC	LC	-	-	L
Black-capped Kingfisher	<i>Halcyon pileata</i>	LC	LC	-	-	I
Great Barbet	<i>Psilopogon virens</i>	LC	LC	-	TC	B,D,E,F,G,H,I,J,K,L
Golden-throated Barbet	<i>Psilopogon franklinii</i>	LC	DD	-	-	B,D,E,F,G,H,I,J,K
Blue-throated Barbet	<i>Psilopogon asiaticus</i>	LC	DD	-	-	D,E,F,G,H
Yellow-rumped Honeyguide	<i>Indicator xanthonotus</i>	NT	NT	-	TC	G,I
Eurasian Wryneck	<i>Jynx torquilla</i>	LC	LC	-	TC	L
Bay Woodpecker	<i>Blythipicus pyrrhotis</i>	LC	LC	-	-	E,F,G,H,I,J
Greater Yellownape	<i>Chrysophlegma flavinucha</i>	LC	EN	-	TC	G,I,J
Grey-faced Woodpecker	<i>Picus canus</i>	LC	LC	-	-	J
Grey-capped Woodpecker	<i>Picoides canicapillus</i>	LC	LC	-	-	B,G,I,J
Crimson-breasted Woodpecker	<i>Dryobates pernyii</i>	LC	-	-	-	G,I,J
Rufous-bellied Woodpecker	<i>Dendrocopos hyperythrus</i>	LC	LC	-	TC	J
Stripe-breasted Woodpecker	<i>Dendrocopos atratus</i>	LC	DD	-	TC	J

Common name	Scientific name	Conservation status			First record	Survey locations
		1	2	3		
Darjeeling Woodpecker	<i>Dendrocopos darjellensis</i>	LC	LC	-	-	I,J,L
Great Spotted Woodpecker	<i>Dendrocopos major</i>	LC	LC	-	-	G,I,J
Common Kestrel	<i>Falco tinnunculus</i>	LC	LC	II	-	H,J,L
Eurasian Hobby	<i>Falco subbuteo</i>	LC	LC	II	-	G
Peregrine Falcon	<i>Falco peregrinus</i>	LC	NT	II	TC	G,L
Grey-headed Parakeet	<i>Psittacula finschii</i>	NT	DD	II	-	D,I
Long-tailed Broadbill	<i>Psarisomus dalhousiae</i>	LC	NT	II	TC	D
Maroon Oriole	<i>Oriolus traillii</i>	LC	NT	-	-	D,G,I,L
Slender-billed Oriole	<i>Oriolus tenuirostris</i>	LC	DD	-	-	B,E
Black-headed Shrike-babbler	<i>Pteruthius rufiventer</i>	LC	DD	-	TC	H,I,J
White-browed Shrike-babbler	<i>Pteruthius aeralatus</i>	LC	LC	-	-	B,D,E,F,G,H,I,J
Green Shrike-babbler	<i>Pteruthius xanthochlorus</i>	LC	NT	-	TC	D,G,I,J
Black-eared Shrike-babbler	<i>Pteruthius melanotis</i>	LC	DD	-	-	G,I
Chestnut-fronted Shrike-babbler	<i>Pteruthius aenobarbus</i>	LC	DD	-	TC	J
White-bellied Erpornis	<i>Erpornis zantholeuca</i>	LC	LC	-	-	D,F,G,I,J
Grey-chinned Minivet	<i>Pericrocotus solaris</i>	LC	LC	-	-	F,G,H,I,K,L
Short-billed Minivet	<i>Pericrocotus brevirostris</i>	LC	LC	-	-	D,E,F,G,I,J,L
Long-tailed Minivet	<i>Pericrocotus ethologus</i>	LC	LC	-	-	F,H,J
Scarlet Minivet	<i>Pericrocotus flammeus</i>	LC	LC	-	-	B,D,E,F,G,I,J
Rosy Minivet	<i>Pericrocotus roseus</i>	LC	LC	-	-	F
Large Cuckoo-shrike	<i>Coracina javensis</i>	LC	LC	-	-	B,J
Black-winged Cuckoo-shrike	<i>Lalage melaschistos</i>	LC	LC	-	-	D,I
Bar-winged Flycatcher-shrike	<i>Hemipus picatus</i>	LC	DD	-	TC	D,G,H
White-throated Fantail	<i>Rhipidura albicollis</i>	LC	LC	-	-	D,E,F,G,H,I,J,K
Black Drongo	<i>Dicrurus macrocercus</i>	LC	LC	-	-	D,E,G,I,J,L
Ashy Drongo	<i>Dicrurus leucophaeus</i>	LC	LC	-	-	B,D,E,F,G,I,J,L
Bronzed Drongo	<i>Dicrurus aeneus</i>	LC	LC	-	-	D,J,L
Hair-crested Drongo	<i>Dicrurus hottentottus</i>	LC	LC	-	-	G
Oriental Paradise-flycatcher	<i>Terpsiphone affinis</i>	LC	NT	-	-	D
Brown Shrike	<i>Lanius cristatus</i>	LC	LC	-	-	F,J
Burmese Shrike	<i>Lanius colluriooides</i>	LC	NT	-	-	C
Long-tailed Shrike	<i>Lanius schach</i>	LC	LC	-	-	B,C,D,F,G,H,I,J,K,L
Grey-backed Shrike	<i>Lanius tephronotus</i>	LC	LC	-	-	E,G,H,I,J
Grey Treepie	<i>Dendrocitta formosae</i>	LC	LC	-	-	D,F,L
Yellow-billed Blue Magpie	<i>Urocissa flavirostris</i>	LC	LC	-	-	J
Red-billed Blue Magpie	<i>Urocissa erythrorhyncha</i>	LC	LC	-	-	D,F,G,H,I,J,L
Eurasian Jay	<i>Garrulus glandarius</i>	LC	LC	-	TC	B,J
Eurasian Magpie	<i>Pica pica</i>	LC	LC	-	-	E,G,H,J,L
Southern Nutcracker	<i>Nucifraga hemispila</i>	LC	LC	-	-	J
Large-billed Crow	<i>Corvus macrorhynchos</i>	LC	LC	-	-	C,E,G,H,I,J,L
Yellow-bellied Fairy-fantail	<i>Chelidopteryx hypoxanthus</i>	LC	LC	-	-	B,E,F,G,H,I,J,L
Grey-headed Canary-flycatcher	<i>Culicicapa ceylonensis</i>	LC	LC	-	-	B,D,F,G,H,I,J,K,L
Fire-capped Tit	<i>Cephalopyrus flammiceps</i>	LC	LC	-	-	E,H
Yellow-browed Tit	<i>Sylviparus modestus</i>	LC	LC	-	-	G,H,I,J,L

Common name	Scientific name	Conservation status			First record	Survey locations
		1	2	3		
Sultan Tit	<i>Melanochlora sultanea</i>	LC	DD	-	TC	D
Coal Tit	<i>Periparus ater</i>	LC	LC	-	TC	H,J
Grey-crested Tit	<i>Lophophanes dichrous</i>	LC	LC	-	TC	J
Green-backed Tit	<i>Parus monticolus</i>	LC	LC	-	-	B,D,E,F,G,H,I,J,K,L
Great Tit	<i>Parus major</i>	LC	LC	-	-	A,B,D,F,G,H,I,J,L
Yellow-cheeked Tit	<i>Machlolophus spilonotus</i>	LC	LC	-	-	D,E,G,I,J,L
Oriental Skylark	<i>Alauda gulgula</i>	LC	LC	-	-	C,E,F
Zitting Cisticola	<i>Cisticola juncidis</i>	LC	LC	-	-	C
Hill Prinia	<i>Prinia superciliaris</i>	LC	LC	-	-	D,F,G,I
Plain Prinia	<i>Prinia inornata</i>	LC	LC	-	-	C
Common Tailorbird	<i>Orthotomus sutorius</i>	LC	LC	-	TC	D,I
Pygmy Cupwing	<i>Pnoepyga pusilla</i>	LC	LC	-	-	E,F,G,I,J,L
Russet Grasshopper-warbler	<i>Locustella mandelli</i>	LC	LC	-	TC	J
Striated Grassbird	<i>Megalurus palustris</i>	LC	LC	-	-	C
Asian House Martin	<i>Delichon dasypus</i>	LC	LC	-	TC	F,G,I,J,L
Nepal House Martin	<i>Delichon nipalense</i>	LC	LC	-	-	G,J
Red-rumped Swallow	<i>Cecropis daurica</i>	LC	LC	-	-	D,F,H,L
Barn Swallow	<i>Hirundo rustica</i>	LC	LC	-	-	B,D,F,G,H,I,J,L
Asian Plain Martin	<i>Riparia chinensis</i>	LC	LC	-	TC	D,J,L
Ashy Bulbul	<i>Hemixos flavala</i>	LC	LC	-	TC	D
Mountain Bulbul	<i>Ixos mcclellandii</i>	LC	LC	-	-	B,D,E,F,G,I,J,K,L
Black Bulbul	<i>Hypsipetes leucocephalus</i>	LC	LC	-	-	B,D,E,G,H,I,J,K,L
Crested Finchbill	<i>Spizixos canifrons</i>	LC	LC	-	-	B,D,E,F,G,H,I,K,L
Striated Bulbul	<i>Pycnonotus striatus</i>	LC	LC	-	-	E,G,I,L
Brown-breasted Bulbul	<i>Pycnonotus xanthorrhous</i>	LC	LC	-	-	B,D,E,F,G,H,I,J,L
Red-vented Bulbul	<i>Pycnonotus cafer</i>	LC	LC	-	-	B,D,E,G,L
Flavescens Bulbul	<i>Pycnonotus flavescens</i>	LC	NT	-	TC	D,F,G,H
Yellow-browed Warbler	<i>Phylloscopus inornatus</i>	LC	LC	-	-	B,H,J
Sichuan Leaf-warbler	<i>Phylloscopus forresti</i>	LC	LC	-	TC	J
Buff-barred Warbler	<i>Phylloscopus pulcher</i>	LC	LC	-	-	G,H,I,J
Ashy-throated Warbler	<i>Phylloscopus maculipennis</i>	LC	LC	-	-	B,F,G,H,I,J
Dusky Warbler	<i>Phylloscopus fuscatus</i>	LC	LC	-	-	J,L
Buff-throated Warbler	<i>Phylloscopus subaffinis</i>	LC	LC	-	-	F,I,J,L
Tickell's Leaf-warbler	<i>Phylloscopus subaffinis</i>	LC	LC	-	-	I
Yellow-streaked Warbler	<i>Phylloscopus armandii</i>	LC	LC	-	-	G
White-spectacled Warbler	<i>Phylloscopus intermedius</i>	LC	LC	-	TC	F,G,I,J
Grey-cheeked Warbler	<i>Phylloscopus poliocephalus</i>	LC	LC	-	-	I,J
Grey-crowned Warbler	<i>Phylloscopus tephrocephalus</i>	LC	LC	-	-	G,J
Bianchi's Warbler	<i>Phylloscopus valentini</i>	LC	LC	-	-	H,J
Chestnut-crowned Warbler	<i>Phylloscopus castaneiceps</i>	LC	LC	-	-	E,I,J,L
Greenish Warbler	<i>Phylloscopus trochiloides</i>	LC	LC	-	-	H
Large-billed Leaf-warbler	<i>Phylloscopus magnirostris</i>	LC	LC	-	TC	J
Blyth's Leaf-warbler	<i>Phylloscopus reguloides</i>	LC	LC	-	TC	B,D,E,F,G,H,I,J
White-tailed Leaf-warbler	<i>Phylloscopus intensior</i>	LC	LC	-	-	E,F,I,J

Common name	Scientific name	Conservation status			First record	Survey locations
		1	2	3		
Grey-bellied Tesia	<i>Tesia cyaniventer</i>	LC	LC	-	-	G,I,J
Grey-sided Bush-warbler	<i>Cettia brunnifrons</i>	LC	LC	-	-	G
Chestnut-headed Tesia	<i>Cettia castaneocorona</i>	LC	LC	-	TC	G,I,J
Black-faced Warbler	<i>Abroscopus schisticeps</i>	LC	LC	-	-	E,G,H,I,J,K
Mountain Tailorbird	<i>Phylloscopus cucullatus</i>	LC	LC	-	-	E,G,I,J
Broad-billed Warbler	<i>Tickellia hodgsoni</i>	LC	LC	-	TC	G
Brownish-flanked Bush-warbler	<i>Horornis fortipes</i>	LC	LC	-	-	C,D,F,G,H,I,J,L
Aberrant Bush-warbler	<i>Horornis flavolivaceus</i>	LC	LC	-	-	G,J
Black-throated Tit	<i>Aegithalos concinnus</i>	LC	LC	-	-	B,D,E,F,G,H,I,J,L
Black-browed Tit	<i>Aegithalos bonvaloti</i>	LC	LC	-	-	E,G,I,J
Fire-tailed Myzornis	<i>Myzornis pyrrhura</i>	LC	NT	-	TC	G,J
Golden-breasted Fulvetta	<i>Lioparus chrysotis</i>	LC	LC	-	-	G,H
White-browed Fulvetta	<i>Fulvetta vinipectus</i>	LC	LC	-	-	G,H,I,J
Manipur Fulvetta	<i>Fulvetta manipurensis</i>	LC	-	-	TC	E,G,I,J,L
Spectacled Fulvetta	<i>Fulvetta ruficapilla</i>	LC	LC	-	-	I,J
Spot-breasted Parrotbill	<i>Paradoxornis guttaticollis</i>	LC	LC	-	-	D,E,I
Brown Parrotbill	<i>Cholornis unicolor</i>	LC	LC	-	TC	G,H,J,L
Fulvous Parrotbill	<i>Suthora fulvifrons</i>	LC	LC	-	-	G,H
Black-throated Parrotbill	<i>Suthora nipalensis</i>	LC	DD	-	-	E,G,J,L
Brown-winged Parrotbill	<i>Sinosuthora brunnea</i>	LC	LC	-	-	B,D,E,F,G,H,I,J
White-collared Yuhina	<i>Yuhina diademata</i>	LC	LC	-	-	F,G,H,I,J
Striated Yuhina	<i>Yuhina castaniceps</i>	LC	LC	-	TC	D,I
Stripe-throated Yuhina	<i>Yuhina gularis</i>	LC	LC	-	-	E,F,G,H,I,J,L
Whiskered Yuhina	<i>Yuhina flavicollis</i>	LC	LC	-	-	B,D,E,F,G,I,J,K,L
Rufous-vented Yuhina	<i>Yuhina occipitalis</i>	LC	LC	-	-	E,F,G,H,I,J,L
Chestnut-flanked White-eye	<i>Zosterops erythropleurus</i>	LC	LC	-	TC	E,G
Japanese White-eye	<i>Zosterops japonicus</i>	LC	LC	-	-	F,G,H,J,L
Oriental White-eye	<i>Zosterops palpebrosus</i>	LC	LC	-	-	D,E,F,H,I,J
Bar-winged Wren-babbler	<i>Spelaeornis troglodytoides</i>	LC	LC	-	-	J
Grey-bellied Wren-babbler	<i>Spelaeornis reptatus</i>	LC	-	-	-	G
Slender-billed Scimitar-babbler	<i>Pomatorhinus superciliaris</i>	LC	NT	-	-	G,J
Streak-breasted Scimitar-babbler	<i>Pomatorhinus ruficollis</i>	LC	LC	-	-	D,E,F,G,H,I,J,L
Black-streaked Scimitar-babbler	<i>Erythrogenys gravivox</i>	LC	-	-	-	D,F,G,H,I,J,L
Rufous-capped Babbler	<i>Cyanoderma ruficeps</i>	LC	LC	-	-	D,E,F,G,H,I,J,K,L
Rusty-capped Fulvetta	<i>Schoeniparus dubius</i>	LC	LC	-	-	D,E,F,G,H,I,J,L
Yellow-throated Fulvetta	<i>Schoeniparus cinereus</i>	LC	LC	-	-	H
Rufous-winged Fulvetta	<i>Schoeniparus castaneiceps</i>	LC	LC	-	-	B,E,G,H,I,J,K,L
Grey-cheeked Fulvetta	<i>Alcippe morrisonia</i>	LC	LC	-	-	B,D,E,F,G,H,I,J,L
Striated Laughingthrush	<i>Grammatoptila striata</i>	LC	LC	-	TC	I,J
Himalayan Cutia	<i>Cutia nipalensis</i>	LC	LC	-	-	G,I
Spotted Laughingthrush	<i>Garrulax ocellatus</i>	LC	NT	-	TC	L
Western Moustached Laughingthrush	<i>Garrulax cineraceus</i>	LC	LC	-	-	D
White-browed Laughingthrush	<i>Garrulax sannio</i>	LC	LC	-	-	B,D,F,G,I,J,L
Black-throated Laughingthrush	<i>Garrulax chinensis</i>	LC	LC	-	TC	G

Common name	Scientific name	Conservation status			First record	Survey locations
		1	2	3		
Chinese Babax	<i>Garrulax lanceolatus</i>	LC	LC	-	-	E,I,J,K,L
White-throated Laughingthrush	<i>Garrulax albogularis</i>	LC	LC	-	-	J
Grey-sided Laughingthrush	<i>Garrulax caerulatus</i>	LC	LC	-	-	E
Scaly Laughingthrush	<i>Trochalopteron subunicolor</i>	LC	LC	-	-	I
Blue-winged Laughingthrush	<i>Trochalopteron squamatum</i>	LC	LC	-	TC	G
Black-faced Laughingthrush	<i>Trochalopteron affine</i>	LC	LC	-	-	G,J
Red-tailed Laughingthrush	<i>Trochalopteron milnei</i>	LC	LC	-	-	I,J
Chestnut-crowned Laughingthrush	<i>Trochalopteron erythrocephalum</i>	LC	LC	-	-	E,F,G,J,L
Beautiful Sibia	<i>Heterophasia pulchella</i>	LC	LC	-	-	E,G,H,I,J,L
Black-headed Sibia	<i>Heterophasia desgodinsi</i>	LC	-	-	-	B,D,F,G,H,I,J
Silver-eared Mesia	<i>Leiothrix argentauris</i>	LC	NT	-	TC	B,D,E,F,I
Red-billed Leiothrix	<i>Leiothrix lutea</i>	LC	LC	-	-	B,E,I,J
Red-tailed Minla	<i>Minla ignotincta</i>	LC	LC	-	-	B,E,F,G,H,I,J,K,L
Scarlet-faced Liocichla	<i>Liocichla ripponi</i>	LC	NT	-	TC	B,F
Streak-throated Barwing	<i>Sibia waldeni</i>	LC	LC	-	-	G,H,I,J
Blue-winged Minla	<i>Siva cyanouroptera</i>	LC	LC	-	-	A,B,D,F,G,H,I,J
Bar-throated Minla	<i>Chrysominla strigula</i>	LC	LC	-	-	B,E,F,G,H,I,J,L
Rusty-fronted Barwing	<i>Actinodura egertoni</i>	LC	LC	-	-	E,F,G,I
Rusty-flanked Treecreeper	<i>Certhia nipalensis</i>	LC	LC	-	TC	G,H,J
Manipur Treecreeper	<i>Certhia manipurensis</i>	LC	LC	-	-	J
Bar-tailed Treecreeper	<i>Certhia himalayana</i>	LC	LC	-	TC	J
Hodgson's Treecreeper	<i>Certhia hodgsoni</i>	LC	-	-	TC	J
Chestnut-vented Nuthatch	<i>Sitta nagaensis</i>	LC	LC	-	-	B,E,F,G,H,I,J,L
White-tailed Nuthatch	<i>Sitta himalayensis</i>	LC	NT	-	-	G,H,I,J
Yunnan Nuthatch	<i>Sitta yunnanensis</i>	NT	VU	-	-	H
Wallcreeper	<i>Tichodroma muraria</i>	LC	LC	-	-	I
Northern Wren	<i>Troglodytes troglodytes</i>	LC	LC	-	TC	H,J
Brown Dipper	<i>Cinclus pallasii</i>	LC	LC	-	-	I,J
Black-collared Starling	<i>Gracupica nigricollis</i>	LC	LC	-	-	C,H
Chestnut-tailed Starling	<i>Sturnia malabarica</i>	LC	LC	-	-	L
White-cheeked Starling	<i>Spodiopsar cineraceus</i>	LC	LC	-	TC	A
Collared Myna	<i>Acridotheres albocinctus</i>	LC	LC	-	-	A
Crested Myna	<i>Acridotheres cristatellus</i>	LC	LC	-	-	A,C,E
Long-tailed Thrush	<i>Zoothera dixoni</i>	LC	LC	-	TC	I
Himalayan Forest Thrush	<i>Zoothera salimalii</i>	LC	LC	-	TC	G,H
Dark-sided Thrush	<i>Zoothera marginata</i>	LC	LC	-	TC	L
Scaly Thrush	<i>Zoothera dauma</i>	LC	LC	-	-	F,G
Purple Cochoa	<i>Cochoa purpurea</i>	LC	LC	-	TC	J
Eurasian Blackbird	<i>Turdus merula</i>	LC	LC	-	TC	D,E,H,L
Grey-winged Blackbird	<i>Turdus boulboul</i>	LC	LC	-	TC	L
Black-breasted Thrush	<i>Turdus dissimilis</i>	LC	NT	-	-	B,D,H,K
Eyebrowed Thrush	<i>Turdus obscurus</i>	LC	LC	-	-	F,I,L
Chestnut Thrush	<i>Turdus rubrocanus</i>	LC	LC	-	TC	G
Oriental Magpie-robin	<i>Copsychus saularis</i>	LC	LC	-	-	B,D,E,G,H,J,L

Common name	Scientific name	Conservation status			First record	Survey locations
		1	2	3		
Dark-sided Flycatcher	<i>Muscicapa sibirica</i>	LC	LC	-	-	F,G,I,J
Ferruginous Flycatcher	<i>Muscicapa ferruginea</i>	LC	LC	-	-	G,I,J,K
Brown-breasted Flycatcher	<i>Muscicapa muttui</i>	LC	LC	-	TC	B
Rufous-bellied Niltava	<i>Niltava sundara</i>	LC	LC	-	-	G,I,J
Small Niltava	<i>Niltava macgrigoriae</i>	LC	LC	-	TC	G,J
Large Vivid Niltava	<i>Niltava oatesi</i>	LC	LC	-	TC	I
Fujian Niltava	<i>Niltava davidi</i>	LC	LC	-	TC	G,J
Large Niltava	<i>Niltava grandis</i>	LC	LC	-	-	B,I
Verditer Flycatcher	<i>Eumyias thalassinus</i>	LC	LC	-	-	B,D,E,F,G,I,J
Pale Blue-flycatcher	<i>Cyornis unicolor</i>	LC	LC	-	-	I,J
Hill Blue-flycatcher	<i>Cyornis banyumas</i>	LC	LC	-	-	D,G
Lesser Shortwing	<i>Brachypteryx leucophris</i>	LC	LC	-	-	I,J
Himalayan Shortwing	<i>Brachypteryx cruralis</i>	LC	LC	-	-	B,G,J
Indian Blue Robin	<i>Larvivora brunnea</i>	LC	LC	-	-	B
Siberian Rubythroat	<i>Calliope calliope</i>	LC	LC	-	-	F,I
White-tailed Blue Robin	<i>Myiomela leucura</i>	LC	LC	-	-	E,J
Himalayan Bush-robin	<i>Tarsiger rufilatus</i>	LC	-	-	TC	B,G,H,I,J,L
White-browed Bush-robin	<i>Tarsiger indicus</i>	LC	LC	-	TC	F,I
Golden Bush-robin	<i>Tarsiger chrysaeus</i>	LC	LC	-	-	G,H,J
Little Forktail	<i>Enicurus scouleri</i>	LC	LC	-	-	G,H,I,J
Slaty-backed Forktail	<i>Enicurus schistaceus</i>	LC	LC	-	-	D,I,J,L
White-crowned Forktail	<i>Enicurus leschenaulti</i>	LC	-	-	TC	D,E,H,I
Spotted Forktail	<i>Enicurus maculatus</i>	LC	LC	-	-	D,G,I,J,L
Blue Whistling-thrush	<i>Myophonus caeruleus</i>	LC	LC	-	-	D,G,H,I,J,K
Slaty-backed Flycatcher	<i>Ficedula erythacus</i>	LC	LC	-	-	G,H,I,J
Slaty-blue Flycatcher	<i>Ficedula tricolor</i>	LC	LC	-	TC	B,F,J
Snowy-browed Flycatcher	<i>Ficedula hyperythra</i>	LC	LC	-	-	E,G,J
Pygmy Blue-flycatcher	<i>Ficedula hodgsoni</i>	LC	LC	-	-	G,J
Rufous-gorgeted Flycatcher	<i>Ficedula strophiata</i>	LC	LC	-	-	G,H,J
Sapphire Flycatcher	<i>Ficedula sapphira</i>	LC	LC	-	-	J
Little Pied Flycatcher	<i>Ficedula westermanni</i>	LC	LC	-	-	B,D,F,G,I,J,L
Red-throated Flycatcher	<i>Ficedula albicilla</i>	LC	LC	-	-	F,G,I
Blue-fronted Redstart	<i>Phoenicurus frontalis</i>	LC	LC	-	-	B,E,G,H,I,J,L
White-capped Water-redstart	<i>Phoenicurus leucocephalus</i>	LC	LC	-	-	D,G,H,I,J,L
Plumbeous Water-redstart	<i>Phoenicurus fuliginosus</i>	LC	LC	-	-	D,E,G,H,I,J,K
Daurian Redstart	<i>Phoenicurus auroreus</i>	LC	LC	-	-	B,F,H,I,L
Hodgson's Redstart	<i>Phoenicurus hodgsoni</i>	LC	LC	-	-	L
Chestnut-bellied Rock-thrush	<i>Monticola rufiventris</i>	LC	LC	-	-	F,H,I,J
Blue Rock-thrush	<i>Monticola solitarius</i>	LC	LC	-	-	J
Grey Bushchat	<i>Saxicola ferreus</i>	LC	LC	-	-	B,D,E,F,G,H,I,J,L
Pied Bushchat	<i>Saxicola caprata</i>	LC	LC	-	-	D,H
Common Stonechat	<i>Saxicola torquatus</i>	LC	LC	-	-	C,D,E,F,G,H,I,J,L
Goldcrest	<i>Regulus regulus</i>	LC	LC	-	TC	F,I
Orange-bellied Leafbird	<i>Chloropsis hardwickii</i>	LC	LC	-	-	D,F,G,H,I

Common name	Scientific name	Conservation status			First record	Survey locations
		1	2	3		
Blue-winged Leafbird	<i>Chloropsis moluccensis</i>	LC	LC	-	TC	D
Yellow-bellied Flowerpecker	<i>Dicaeum melanozanthum</i>	LC	LC	-	-	E,G,I,J
Plain Flowerpecker	<i>Dicaeum minullum</i>	LC	LC	-	-	E,L
Fire-breasted Flowerpecker	<i>Dicaeum ignipectus</i>	LC	LC	-	-	D,E,F,G,H,I,J,K,L
Streaked Spiderhunter	<i>Arachnothera magna</i>	LC	LC	-	-	B
Fire-tailed Sunbird	<i>Aethopyga ignicauda</i>	LC	LC	-	-	E,G,H,I,J,L
Black-throated Sunbird	<i>Aethopyga saturata</i>	LC	LC	-	-	D,F
Green-tailed Sunbird	<i>Aethopyga nipalensis</i>	LC	LC	-	-	B,F,G,H,I,J,L
Gould's Sunbird	<i>Aethopyga gouldiae</i>	LC	LC	-	-	E,F,G,H,I,J,L
Alpine Accentor	<i>Prunella collaris</i>	LC	LC	-	TC	G
Maroon-backed Accentor	<i>Prunella immaculata</i>	LC	LC	-	-	L
Rufous-breasted Accentor	<i>Prunella strophiata</i>	LC	LC	-	TC	G,H,L
White-rumped Munia	<i>Lonchura striata</i>	LC	LC	-	TC	H
Scaly-breasted Munia	<i>Lonchura punctulata</i>	LC	LC	-	-	E
Russet Sparrow	<i>Passer cinnamomeus</i>	LC	LC	-	-	C,D,E,G,H,I,J,K,L
Eurasian Tree Sparrow	<i>Passer montanus</i>	LC	LC	-	-	H,J,L
Olive-backed Pipit	<i>Anthus hodgsoni</i>	LC	LC	-	-	F,H,I,J
Rosy Pipit	<i>Anthus roseatus</i>	LC	LC	-	-	C
Paddyfield Pipit	<i>Anthus rufulus</i>	LC	LC	-	-	L
Grey Wagtail	<i>Motacilla cinerea</i>	LC	LC	-	-	E,F,I,J,L
Citrine Wagtail	<i>Motacilla citreola</i>	LC	LC	-	-	A,C
Eastern Yellow Wagtail	<i>Motacilla tschutschensis</i>	LC	LC	-	-	C,J
White Wagtail	<i>Motacilla alba</i>	LC	LC	-	-	B,C,D,E,F,G,I,J,K,L
Common Chaffinch	<i>Fringilla coelebs</i>	LC	LC	-	YN	G
Brambling	<i>Fringilla montifringilla</i>	LC	LC	-	TC	H,I,J
Spot-winged Grosbeak	<i>Mycerobas melanozanthos</i>	LC	LC	-	-	J
Common Rosefinch	<i>Carpodacus erythrinus</i>	LC	LC	-	-	G,J
Scarlet Finch	<i>Carpodacus sipahi</i>	LC	LC	-	-	H
Vinaceous Rosefinch	<i>Carpodacus vinaceus</i>	LC	LC	-	TC	G
Crimson-browed Finch	<i>Carpodacus subhimachalus</i>	LC	LC	-	TC	G
Brown Bullfinch	<i>Pyrrhula nipalensis</i>	LC	LC	-	-	F,H,J
Grey-headed Bullfinch	<i>Pyrrhula erythaca</i>	LC	LC	-	TC	G
Gold-naped Finch	<i>Pyrrhoplectes epaulette</i>	LC	LC	-	TC	E
Dark-breasted Rosefinch	<i>Procarduelis nipalensis</i>	LC	LC	-	TC	J,L
Plain Mountain-finches	<i>Leucosticte nemoricola</i>	LC	LC	-	TC	G
Black-headed Greenfinch	<i>Chloris ambigua</i>	LC	LC	-	-	C,D,E,F,G,H,I,J
Red Crossbill	<i>Loxia curvirostra</i>	LC	LC	-	TC	B,F,G,J
Tibetan Siskin	<i>Spinus thibetanus</i>	LC	NT	-	TC	L
Yellow-throated Bunting	<i>Emberiza elegans</i>	LC	LC	-	-	H,K
Little Bunting	<i>Emberiza pusilla</i>	LC	LC	-	-	E,F,H,I,J,L





www.threatenedtaxa.org

PLATINUM
OPEN ACCESS


The Journal of Threatened Taxa (JoTT) is dedicated to building evidence for conservation globally by publishing peer-reviewed articles online every month at a reasonably rapid rate at www.threatenedtaxa.org. All articles published in JoTT are registered under [Creative Commons Attribution 4.0 International License](#) unless otherwise mentioned. JoTT allows unrestricted use, reproduction, and distribution of articles in any medium by providing adequate credit to the author(s) and the source of publication.

ISSN 0974-7907 (Online) | ISSN 0974-7893 (Print)

September 2019 | Vol. 11 | No. 11 | Pages: 14391–14470

Date of Publication: 12 September 2019 (Online & Print)

DOI: [10.11609/jott.2019.11.11.14391-14470](https://doi.org/10.11609/jott.2019.11.11.14391-14470)

Monograph

Communications

Introduction to a four-year biodiversity survey of Tengchong Section of Gaoligongshan National Nature Reserve, in the footsteps of pioneering naturalists in western Yunnan, China

– Bosco Pui Lok Chan, Zeng Bi & Shao-Zhong Duan, Pp. 14391–14401

Mammals of Tengchong Section of Gaoligongshan National Nature Reserve in Yunnan Province, China

– Fei Li, Xiang-Yuan Huang, Xing-Chao Zhang, Xing-Xi Zhao, Jian-Huan Yang & Bosco Pui Lok Chan, Pp. 14402–14414

Current status of birds in Tengchong Section of Gaoligongshan National Nature Reserve, China

– Xi Zheng, Fei Li, Zheng Bi, Xing-Chao Zhang, Ji-Guo Han & Bosco Pui Lok Chan, Pp. 14415–14433

A report on the herpetofauna of Tengchong Section of Gaoligongshan National Nature Reserve, China

– Jian-Huan Yang, Xiang-Yuan Huang, Jian-Fang Ye, Shen-Pin Yang, Xing-Chao Zhang & Bosco Pui-Lok Chan, Pp. 14434–14451

A preliminary report on butterfly fauna (Insecta: Lepidoptera) of Tengchong Section of Gaoligongshan National Nature Reserve, China

– Yik Fui Philip Lo & Zheng Bi, Pp. 14452–14470

Publisher & Host



Partner



Member

