

A new record of Pin-tailed Parrotfinch from Phibsoo Wildlife Sanctuary, Bhutan



Image 1. Ventral (a & d) | dorsal view (b & c) of PP species sighted from Alley under PWS, Bhutan. © Tendel Wangdi.

The Pin-tailed Parrotfinch *Erythrura prasina* Sparrman, 1788 is newly recorded from Alley in Nichula under Phibsoo Wildlife Sanctuary (PWS). With this record, Bhutan now has 745 bird species out of 770 bird species predicted to occur in Bhutan Himalaya. These findings recommend separate study to double check the live presence within previous sighted locality and requires comprehensive morphometric measurements

to ascertain the maximum and minimum limits of total body length (TBL), total body weight (TBW), and wing span length (WSL) including total leg length (TLL) and tarsus length (TL) to ease species identification in future.

The Pin-tailed Parrotfinch (PP) is a popular caged bird species under Estrildidae family. According to Payne (2010), BirdLife

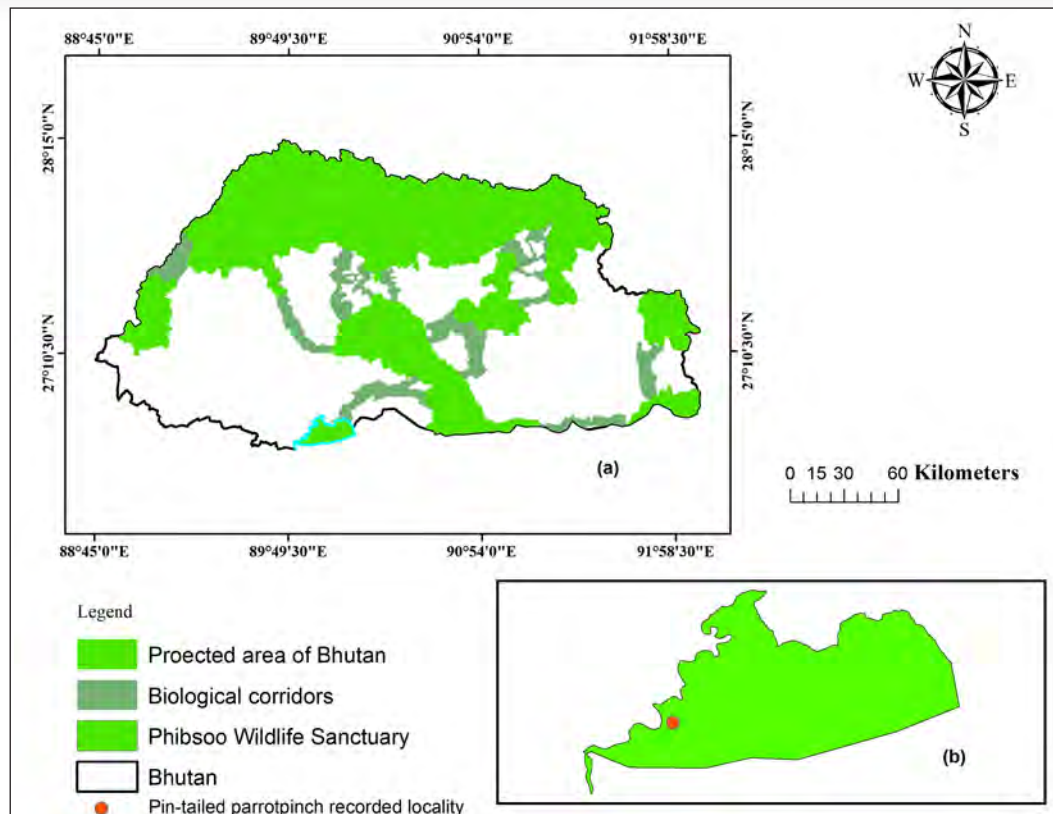


Figure 1 . Map of Bhutan showing protected areas and biological corridors (a) depicting PWS (b) where PP was first sighted from Bhutan (red point).

International (2018), and Grimmet et al. (2011), the male has grassy green back and wings; bright blue mask over face; black lore with black bill; orange-yellow flanks with under-tail coverts. Belly is red with bright red rump; flesh-colored legs with upper tail coverts and long central tail feathers while females have buff; lack red coloring underside and pale red rump with shorter tail. Juveniles are similar to female except dull greenish under-parts, dull orange-red tail and olive rump with yellow mandible.

The parrotfinches are globally distributed across southeastern Asian countries (Brunei, Myanmar, Cambodia, Indonesia, Laos, Malaysia, & Thailand) with estimated global extent of occurrence of 10,000,000 km²

(Birdlife International 2018). It was also recorded from Yunnan Province in China, besides being common caged birds (Sreeker et al. 2014). Recent study found that finches have extended their range towards southern Palawan Province of Philippines (Birdlife International 2018) due to semi-nomadic behaviour and seasonally wandered following the paddy harvest and seeding bamboo (Payne 2010). Meanwhile, the PP is Least Concern (LC) as per IUCN (Birdlife International 2018).

Recently, the PP was newly recorded from PWS in Bhutan (Figure 1). PWS has total area of 286.82km² (DoFPS 2020) located in between 26.700⁰–26.850⁰N and 89.933⁰–90.200⁰E in southern central part of Bhutan

and its smallest protected area in Bhutan with elevation ranging 200–1,600 m (PWS 2012).

The Sanctuary is connected with other protected areas through biological corridor no. 3 (Tenzin & Wangyal 2019) and further connected with Ripu-Chirang Reserved Forest Landscape (RCRFL) in India (PWS 2012). The forest is broadly classified into three different types: sub-tropical semi-evergreen Forest (100–300 m); sub-tropical moist deciduous forest (300–700 m), and sub-tropical moist evergreen forests (700–1,200 m) (PWS 2012). Meanwhile, the sanctuary has recorded 36 mammals, 23 fishes, 50 herpetofauna, 176 butterflies, and 360 bird species including two new species in 2018 and one in 2019 (PWS 2019). Today, PWS is the only protected area where all four hornbill species (Rufous-necked Hornbill *Aceros nipalensis*, Great Hornbill *Buceros bicornis*, Oriental-pied Hornbill *Anthracoceros albirostris*, and Wreathed Hornbill *Rhyticeros undulates*) are found with other globally threatened species.

Tendel Wangdi, ranger from the sanctuary, had recorded PP at around 10.30h on 16 July 2018, from Alley (26.757°N & 89.938°E) under Nichula Range at 176m. The bird was identified using the field guide of Grimmett et al. (2011) and measured the morphometric as per Winker (1996), besides location and habitat details. The species was confirmed by Dr. Sherub, Ugyen Wangchuck Institutes for Conservation and Environmental Research, Bumthang under Department of Forests & Park Services.

The PP is declared as a new record to Bhutan and PWS. Within a decade, PWS has 360 bird species (PWS 2019) which exceeded the initially predicted figures of 200 bird species in the sanctuary (PWS 2012). The diversity of avian fauna is due to intact and diverse sub-tropical ecosystem that falls inside the Indo-Malayan region (PWS 2012). Morphometric measurement revealed that PP had TBL of 14.2cm, 15.1cm WSL with TBW of 14.7g. While, PP has a TLL of 4.1cm with 2.4cm TL. Sreeker et al. (2014), however, reported that the finches recorded from Menglun, China (21.931°N, 101.237°E) has a TBL of 13.7cm with TBW of 12.5g, which indicates that the specimen found by Sreeker et al. (2014) was moderately smaller than the current specimen in terms of TBL, WSL, and TBW, respectively.

The current specimen was dead, which might have resulted in morphological shrinkages as reported by Winker (1996). Similar dead specimens were also recorded from Xishuangbanna Tropical Botanical Garden (XTBG), Yunnan Province, China on 19 December 2013 (Sreeker et al. 2014). Sreeker et al. (2014) later confirmed their presence on 4 January 2014 through photographic evidences from the edge of secondary rainforest in XTBG which confirmed that they were not escaped caged birds, rather a new record for China.

In terms of habitat, PP was recorded from seeded bamboo thickets *Bambusa nutan* with flocks of Scaly-breasted Munia *Lonchura punctulata* Linnaeus, 1758 in Alley,

PWS. Similarly, Evans et al. (1992) reported the same species from open bamboo thickets and secondary forest edges around XTBG in China. Current specimen was recorded from lowest elevation of 176m, while, Evans et al. (1992) reported from higher elevation (1,500m) in XTBG, China which might have shifted to higher elevation due to habitat fragmentation and degradation at lower elevation. Nevertheless, PP is also reported as a pest to agriculturalists due to high preference around agricultural habitats (paddy growing countries) within southern Asian countries (Evans et al. 1992; Payne 2010).

Therefore, newly recorded PP requires separate scrutiny to confirm their live presence from Bhutan. Study on abundance, population size and distribution inside PWS are also imperative. Simultaneously, PP morphometric is critically required to ascertain the maximum and minimum limits for TBL, TBW, and WSL including TLL and TL to ease correct species identification for future studies.

References

- BirdLife International (2018).** Species factsheet: *Erythrura prasina*. Available at: <http://www.birdlife.org>. Accessed on 10 March 2020.
- DoFPS (2020).** Depositing of data of the revised protected area systems of Bhutan by Department of Forests and Park Services (DoFPS/NCD/PAS-01/2020-2021/0808, dated 3rd August 2020). Nature Conservation Division, Department of Forests and Park Services, Ministry of Agriculture and Forests, Bhutan, 1pp.
- Evans, S.M., F.J.C. Fletcher, P.J. Loader & F.G. Rooksby (1992).** Habitat exploitation by land birds in the changing Western Samoan environment. *Bird Conservation International* 2: 123–129. <https://doi.org/10.1017/S0959270900002355>.
- Grimmett, R., C. Inskipp & T. Inskipp (2011).** *Birds of the Indian Subcontinent*. Oxford University Press, UK, 480pp.
- Payne, R.B. (2010).** Family Estrildidae (waxbills), pp. 234–377. In: Del Hoyo, J., A. Elliott & D.A. Christie (eds.) *Handbook of the Birds of the World*, Lynx Edicions, Barcelona, 377pp.
- PWS (2012).** Phibsoo Wildlife Sanctuary: Phibsoo Conservation Management Plan 2012–2017. Nature Conservation Division, Department of Forests and Park Services, Ministry of Agriculture and Forests, Bhutan, 22–106pp.
- PWS (2019).** Birds of Phibsoo Wildlife Sanctuary: a preliminary listing. Phibsoo: Phibsoo Wildlife Sanctuary, Department of Forests and Park Services, Ministry of Agriculture & Forests, Sarpang, Bhutan, 75pp.
- Sreekar, R., S.K. Dayananda, J.B. Zhao, B. Gu, Q. Li, X. Wang & E. Goodale (2014).** First record of Pin-tailed Parrotfinches *Erythrura prasina* from China. *BirdingASIA* 22: 116–117.
- Tenzin, J. & J.T. Wangyal (2019).** New record of Blue-eyed Eastern Spadefoot Toad *Leptobrachium bompu* (Amphibia: Megophryidae) from Sarpang District in Bhutan. *Journal of Threatened Taxa* 11(3): 13385–13389. <https://doi.org/10.11609/jott.4134.11.3.13385-13389>
- Winker, K. (1996).** Specimen shrinkage versus evolution: liwi morphology. *Conservation Biology* 10: 657–658.
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- Tendel Wangdi¹ & Jigme Tenzin²**
- ¹ Ninchula Range, Phibsoo Wildlife Sanctuary, Sarpang District, Department of Forests and Park Services, Bhutan.
- ² Research & Information Unit, Sarpang Forest Division, Sarpang, Department of Forests & Park Services, Bhutan. Email: jigmetenzin16@gmail.com (corresponding author)
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