

Addition of the nominate subspecies of White-throated Needletail *Hirundapus caudacutus caudacutus* to the South Asian avifauna with notes on its identification

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White-throated Needletail *Hirundapus caudacutus*, a member of the Apodidae family, has two subspecies – *H. c. caudacutus* and *H. c. nudipes*. *H. c. caudacutus* breeds across central Siberia extending eastward to Sakhalin and the Kuril Islands, and southward to northern and eastern Mongolia, northeast China, Korea, and Japan. During winters, it migrates to southern New Guinea and eastern Australia. On the other hand, *H. c. nudipes* breeds in the Himalayan foothills, sporadically from northern Pakistan to Assam and Arunachal Pradesh, extending through northern Myanmar to southern China (from Sichuan south to Yunnan). Although not extensively documented, the wintering range could encompass areas such as the Malay Peninsula, Java and Indonesia (Berryman & Eaton 2020; Chantler & Kirwan 2020).

South Asia has not been a documented range of the nominate subspecies. Here, we establish the presence of the nominate subspecies through two photographic records in 2023; from Sikkim in the Indian Himalaya and northern Kerala on the southwestern coast of India.

Sikkim

On 20 May 2023, at 1200 h, CRB observed five White-throated Needletails along with 20 Nepal House Martins *Delichon nipalense* and four Blyth's Swifts *Apus leuconyx*, at Bonfarmhouse (27.28°N, 88.32°E), at an altitude of 1,700 m, located in Kewzing, South Sikkim. The White-throated Needletails were identified by their conspicuous white throat, white horse-shoe crescent at rear end, curved wings, distinctive flight style characterized by fewer wingbeats and a swift-like rapid and omnidirectional long-distance flight and significant size compared to the other birds present at Bonfarmhouse. The observed individuals were photographed during the stationary observation of 3 hrs [275–277, 281, 283, 284]. During this time, they were busy feeding, pooping, and chasing each other with high and low flights in the air at high speed, circling the farmhouse and moving back and forth in the valley facing the Mt. Narshing range of the Sikkim Himalaya. The habitat around Bonfarmhouse includes sparsely populated houses, terrace cultivation fields, and subtropical to temperate forest facing Mt. Kanchenjunga.

The White-throated Needletails were observed for a week along with the flock at Bonfarmhouse. Later, from the photographs of the White-throated Needletail, an anonymous referee who

reviewed an earlier version of this article that carried the Kerala record (see below) identified the Sikkim pictures to also have a single nominate subspecies along four other *H. c. nudipes*. It was characterized by the white-banded forehead, white-banded lore, distinctive pale saddle, and the underparts comparatively lighter and warmer brown than those of *H. c. nudipes*. However, the duration of time *H. c. caudacutus* spent with the flock remains uncertain. There were no previous records of *H. c. caudacutus* from India (eBird 2023), and hence, this was the first instance of the nominate subspecies in India as well as in South Asia.



275. *H. c. caudacutus*, South Sikkim; showing the white-banded forehead and lore as well as blue-green upper wings.



276. *H. c. caudacutus*, South Sikkim; showing the glossed brown underparts.

Chewang R. Bonpo



277. *H. c. caudacutus*, South Sikkim; showing white lore and forehead, blue-green upper wings and distinct mantle saddle.

Kerala

In the afternoon of 04 November 2023, around 1230 h, STK & YPN saw two fast-moving swifts on the top of the western side of the Ponkunnu hill (11.40°N, 75.81°E), a midland laterite hill in Kozhikode, Kerala, mainly inhabited by grassland, shrubs and short trees. Initial observations pointed towards the Brown-backed Needletail *H. giganteus*, usually seen in that area. After photographing [278–280] the individuals, the prominent white throat helped them to rule out the possibility of it being that species. They suspected whether the individuals were White-throated- or Silver-backed Needletail *H. cochinchinensis*. Conspicuous white forehead, a well-defined white throat, white lore, an off-white mantle, pale-grayish upperparts, a subtle bluish-green tinge on the upper wings, elongated saber-shaped wings, sleek and bullet-shaped bodies, and the striking white horseshoe crescent at the rear end concluded that the individuals are White-throated Needletails (Grimmett et al. 2011; Chantler & Kirwan 2020).

The individuals were only seen for two to three minutes; they were flying fast with quick turns over the grassland without making any calls. During that time, there were no other swifts, swallows, martins, or raptors in the cloudy sky. STK, YPN, and many bird watchers visited the area for the next three consecutive days but couldn't find the individuals. Instead, they found a large group of Brown-backed Needletails on 05 November 2023, and Alpine Swifts *Tachymartia melba* on 06 November 2023. YPN transmitted the photographs to Ashwin Viswanathan and Praveen J.; who confirmed the identification.

These were the first record of the species for Kerala; for that matter also for southern India at that time. While reviewing this record, an anonymous referee suggested that this (along with the Sikkim photographs) belonged to the nominate subspecies and hence are two important records at the national level. Though White-throated Needletail has no previous records from peninsular India and central India (eBird 2023), a previous report from Chennai surfaced after ours was reported (Karthikeyan 2020). However, subspecies cannot be identified from the single photograph available for that report.



278. *H. c. caudacutus*, Kerala; showing the glossed brown underparts, white-banded forehead and lore.



279. *H. c. caudacutus*, Kerala; in head-on flight showing the white lore, fore-head as well as blue-green upper wings and distinctive mantle saddle.



280. *H. c. caudacutus*, Kerala; showing the blue-green upper wings, white lore and forehead.

All: N. Yadu Prasad

Identification of subspecies

The nominate subspecies *H. c. caudacutus* differs from *H. c. nudipes* in morphology and migratory habits (Chantler & Kirwan 2020). Distinctive differences in lore, forehead, and mantle patch are observable in the field, while accurate assessment of plumage variation in the upper and underparts necessitates high-quality images (Table 1). It may not be possible to identify all individuals to subspecies level due to the presence of intermediates reported earlier in the specimens at NHMUK from China, having white lore and blue-glossed upperparts (Chantler & Kirwan 2020).

Table 1. Morphological differences between *H. c. caudactus* and *H. c. nudipes* (Chantler & Kirwan 2020; Chantler & Driessens 2010)

Morphological features	<i>H. c. caudactus</i>	<i>H. c. nudipes</i>
Forehead	Brown with a white band	Black
Lore	White band	Black
Mantle Patch	Distinctive mantle patch; palest at the center of the lower mantle and back, especially when worn, but progressively darker towards the nape	Less distinctive, more browner and less silvery-gray mantle patch
Upperparts	Dark wings glossed blue, fading to green on remiges and coverts.	Dark wings glossed darker blue
Underparts	Dark olive-brown, with a brown gloss on the underparts and paler underwings	Darker underparts with a green gloss and darker underwing coverts



281. *H. c. caudactus*, South Sikkim; Note glossed brown underparts, paler wings, and white banded lore and forehead.



282. *H. c. nudipes*, Sarpang, Bhutan; Note darker underparts, darker underwing coverts, black lore and forehead.

Tom Cho



283. *H. c. caudactus*, South Sikkim; Note distinct mantle patch, dark wings with blue gloss fading to green on remiges and coverts, white-banded lore and forehead.



284. *H. c. nudipes*, South Sikkim; Note less distinct mantle patch, dark wings glossed darker blue, black lore and forehead.

Ali: Chewang R. Bonpo

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