

Silver-backed Needletail *Hirundapus cochinchinensis* on Cocos (Keeling) Islands: a bird on Home Island, 1–5 February 2018

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Introduction

This submission involves the sighting of a single bird over several days in February 2018 at Home Island in the Cocos (Keeling) Islands. It was photographed many times over the three days of observation by the authors and watched for long periods on each of these days. Particular attention was made of the colour of the throat, head and back, and the length of the spines in the tail.

If confirmed this would be the first definite record of this species for Australian territory.

Observing the bird

On the morning of 1 February 2018, the authors were on Home Island in the Cocos (Keeling) group when a needletail *Hirundapus* sp. was noticed cruising over a large grove of *Callophyllum* trees *Callophyllum inophyllum*. As any species of needletail is unusual at the Cocos (Keeling) Islands it was decided to look more closely at the bird.

This bird was noticed to have a darker throat than a normal White-throated Needletail *Hirundapus caudacutus*. The authors are familiar with that species, having seen it on many occasions on mainland Australia as well as on the Cocos (Keeling) group itself. Observations were made with binoculars as well as by photographing the bird and examining the photographs afterwards. This was also done on all subsequent occasions. Attempts were made to photograph from all angles, including from both the lagoon as well as the land (see Figure 1).

Observations were made on 1 February 2018 from 08.45–09.30 local time. We discovered the 10.30 ferry was not running owing to the extreme tides associated with the “super blue blood moon”, and so watched the bird again from 13.00–13.45 hours. We returned on 2 February and again observed the bird from 11.45–12.30 hours. We did not visit on 3 February. On 4 February we did not find the Needletail, possibly as there was little wind. Home Island was visited again on 5 February when the bird was observed for the final time from 07.45–09.15. We were told by several Home Islanders that this bird had been present for perhaps as long as a week before our visit on 1 February.

As to be expected, all observations were of the bird in flight, usually with ventral views, though the back was seen on numerous occasions as the bird banked into the wind. However, its back proved difficult to photograph, despite repeated brief observations.

The photographs were emailed to people in mainland Australia during the observation period who agreed with our suspicions that Silver-backed Needletail was the species seen.

Habitat and site

The bird repeatedly looped back over the large grove of *Callophyllum* trees on the ‘corner’ of the island, 400m to the east of Oceania House where Jalan Kampong Atas meets Jalan Balok Memorial. These trees are ~15 m tall and a solid wall of vegetation and create uplift as the breeze flows over them, whether the breeze comes from the ocean or the lagoon.

Figure 1. Geof Christie photographing the bird at midday on 2 February (Photo I. McAllan).



Photographs of the bird.

The following photographs were all taken by Geof Christie.

Figure 2. Side-on view; 1 February, showing reflection of the sun off its wings and tail, as well as the white surface in the centre of the back.



Figure 3. Ventral view; 1 February, showing dull grey throat in contrast to the white vent. Note closed tail creating two long spines as the smaller spines “line-up”.



Figure 4. Ventral view; 1 February, again showing dull grey throat in contrast to the white vent and the two long spines in the tail.



Figure 5. Ventral view; 1 February. Note the bird preening its upper breast, and the tail spread showing the spines in the tail.



Figure 6. Ventral view taken 1 February. Note the dull throat and white vent and the tail spread showing the spines in the tail. Wing also fully spread, showing P10 shorter than P9.



Figure 7. Ventral view; 2 February. Note shows the dull throat and white vent, and dark lores and head. Note the bird “scratching behind its ear” with its left foot.



Figure 8. Ventral view; 2 February. Note the dull throat and white vent with two spines prominent.



Figure 9. Ventral view; 5 February. Note the dull throat and white vent and dark head with dark lores. Tail spread showing spines. Note the front of the head is almost entirely in strong sunlight.



Figure 10. Side-on view; 5 February. This shot does not show any reflection, but the whitish back is clearly visible.



Behaviour

Typically, the bird was using the breeze to fly over the trees from the direction of the ocean, and then looping around to “stall” into the breeze over the trees before returning back towards the ocean side of the island. It was observed preening on several occasions, and usually had a more fluttering flight when this occurred.

Description

Size: the bird appeared to be much the size of a White-throated Needletail, though with perhaps a slightly smaller wingspan. The only other species present for comparison was the White Tern *Gygis alba*, of which there were at least 20 present and breeding in the Callophyllum grove. The bird was similar in size, though smaller than the White Terns.

Jizz/shape: This species was clearly a Hirundapus swift, with rapid movement and sweeping glides. It had long wings that were broad in the middle (hence ‘paddle-shaped’). The body was long and torpedo-shaped, with a head that was large.

Underparts: the bird was largely dark below. It had a dull grey throat and chin that had a fairly sharp boundary with the almost black breast and belly. It had white flanks and undertail coverts – similar to those of a White-throated Needletail. The tail was black. It was rounded when open and pointed when closed. The central spine of each tail feather extended beyond the rest of the feather and was easily seen. These spines were more obvious than those of the White-throated Needletail. When the tail was closed these spines lined up and were visible as two long spines. There were 10 rectrices. The underwing was dark grey.

Upperparts: The bird was largely dark above, though it had a white centre to the mantle, graduating out from the centre of the back through grey to black in colour. The pale mantle was not as noticeable as in the White-throated Needletail, though this distinction is not noticeable in specimens (see Figure 11). The feathers of the wings appeared glossy black. Unfortunately, the colour of the tertials was not seen, though in specimens there is little contrast (see Figure 11). The rest of the upperparts were black or blackish. The head (forehead, crown and nape) was dark, including the lores, and these formed a sharp line where it met the grey throat in the malar area.

Identification

The size of the bird and its jizz matched Hirundapus swifts (Chantler & Driessens 2000). The dark lores and the dull grey throat preclude the White-throated Needletail and the Purple Needletail *H. celebensis* (Collins & Brooke 1976; Chantler & Driessens 2000; Brazil 2009; Menkhorst *et al.* 2017) and are consistent with the Silver-backed Needletail *H. cochinchinensis* (see also Figure 12). The size – evidently smaller than the White Tern, suggests that it was not the larger Brown-backed Needletail *H. giganteus*, which is also eliminated as that species has an entirely dark throat. The small white area on the mantle agrees with the Silver-backed Needletail (Brazil 2009; Menkhorst *et al.* 2017), a feature not found in Brown-backed Needletail or Purple Needletail. Although prominent spines are found in the tail of White-throated Needletail, in that species they are shorter than in the subject bird. The prominence and length of the spines in the subject bird are consistent with the Silver-backed Needletail – in particular, see Figure 13, from Collins & Brooke (1976), where the tail spines of all needletail species are shown.

Figure 11. Dorsal view of needletail specimens in the Lee Kong Chian Museum in Singapore. White-throated Needletail on left, Silver-backed Needletail centre, Brown-backed needletail on right. (Photo: I. McAllan).



Figure 12. Ventral view of needletail specimens in the Lee Kong Chian Museum in Singapore. White-throated Needletail on left, Silver-backed Needletail centre, Brown-backed needletail on right. (Photo: I. McAllan).



Figure 13. Tails spines of Needletails, *Hirundapus* species. Image from Collins & Brooke (1976).
 White-throated Needletail = B
 Silver-backed Needletail = C and D;
 Purple Needletail = E
 Brown-backed Needletail = F.

1976

A REVIEW OF THE SWIFTS

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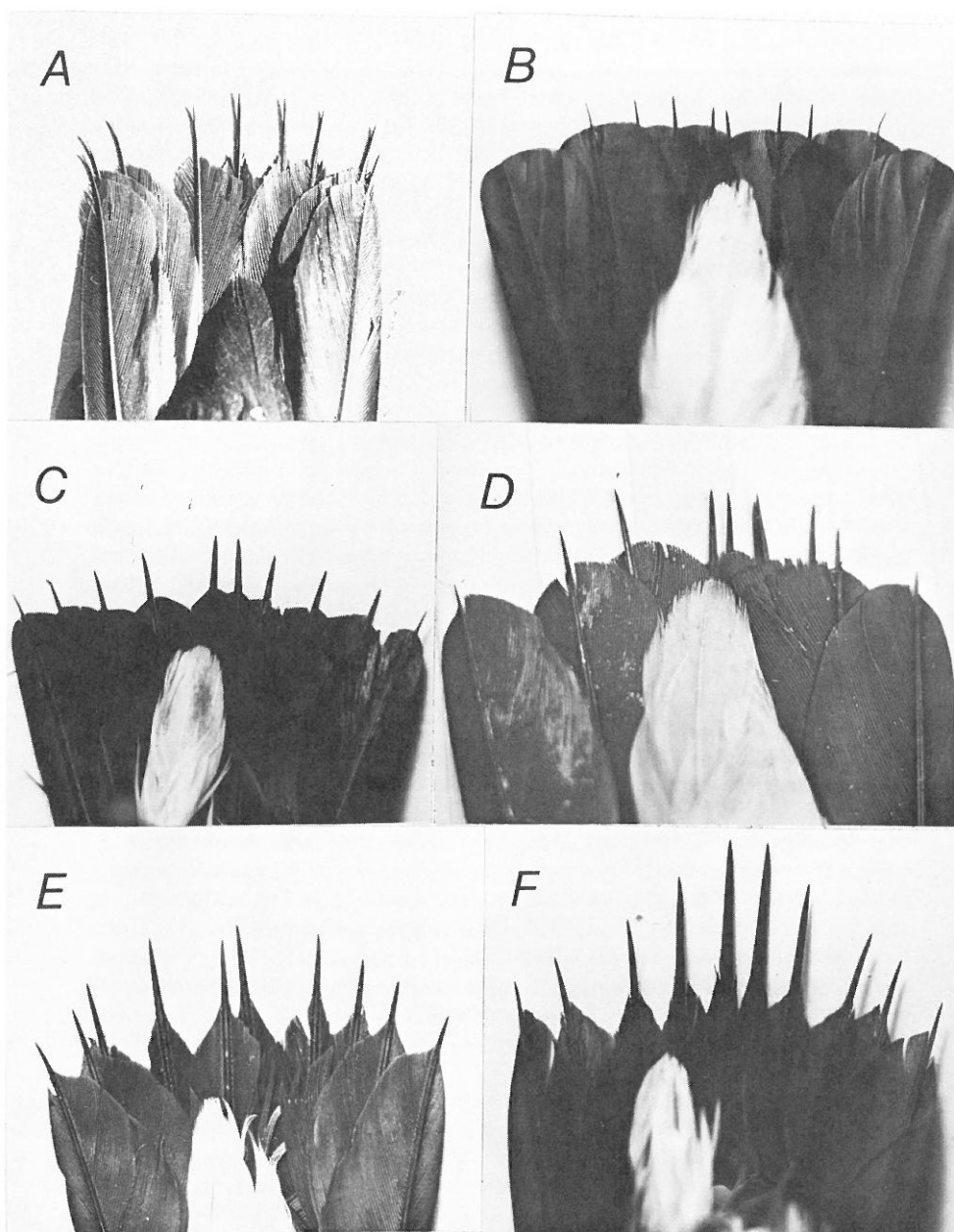


FIGURE 3. Tail spines of *Chaetura* and *Hirundapus* swifts: A—*Chaetura cinereiventris lawrenci*, B—*Hirundapus c. caudacutus*, C—*H. c. cochinchinensis*, D—*H. cochinchinensis formosanus*, E—*H. celebensis*, F—*H. giganteus indicus*. Not to same scale.

Geographical variation

The subspecies and their ranges are imperfectly known. Chantler & Driessens (2000) listed three subspecies: nominate *cochinchinensis* (Eastern Himalayas through SE Asia); *H.c. rupchandi* (central Nepal); and *H.c. formosanus* (Taiwan). Note that the validity of the subspecies *H. cochinchinensis rupchandi* was questioned by Mees (1973). Collins & Brooke (1976) were also ambivalent in recognising this subspecies. Both noted that it is possible that the paler individuals of *rupchandi* were merely a function of wear in the nominate subspecies. Mees (1973) noted that the colour range of individuals from Java represented a complete cline between the supposed subspecies, both of which are reported to occur on Java (see Eaton *et al.* 2016). Chantler & Driessens (2000) considered that *formosanus* is poorly differentiated and it was recognised by Collins & Brooke (1976) largely based on its isolation.

The differences between the subspecies are too poorly marked and/or understood to allow confident subspecific identification of the subject bird.

Moult

Although the bird superficially appeared to have fresh feathers, the fact that it was photographed preening twice (Figures 5 and 7), suggests that either it was infested with parasites such as Mallophaga, or that body moult was occurring. In addition, Figures 6 and 9 show that the outermost primary (P10) of both wings was just shorter than P9, suggesting that P10 was a retained feather and may indicate arrested moult in the primaries. Mees (1973) noted that there was no evidence of moult of primary feathers in Silver-backed Needletails collected in Sumatra and Java and that a complete primary moult probably occurred before the southern migration.

Timing of this record

The date of this occurrence fits within the known dates of Silver-backed Needletails from Sumatra and Java (Mees 1973; Van Marle & Voous 1988). Mees (1973) noted that specimens from these islands fall within the period November to March, whereas Eaton *et al.* (2016) gave a date range of September to April for all of Indonesia. Records from peninsular Malaysia fall between September and April (Wells 1999) and in Singapore from September to March (Wang & Hails 2007).

Previous records

To date BARC has not accepted any records of this species. BARC has a report of Brown-backed Needletail from Christmas Island on 14–15 November 2001, but this was not accepted. Another record of a bird seen on Christmas Island on 11 February 2002 that was submitted as either Brown-backed or Silver-backed Needletail was accepted, though acceptance of either species could not be confirmed.

We are aware of other reports/records not submitted, including:

A bird claimed as Silver-backed Needletail recorded at the Rubbish Tip on Christmas Island on 26 November 2008 (see James & McAllan 2014).

A bird claimed as Silver-backed Needletail at the Quarantine Station on West Island, Cocos (Keeling) group on 4 November 2011 (Baxter 2011).

Acknowledgements

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