

Short Communication

A significant northward range extension of the White-nest Swiftlet (*Aerodramus fuciphagus*) in Kachin State, Myanmar

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ABSTRACT

The White-nest Swiftlet (*Aerodramus fuciphagus* Thunberg, 1812) is primarily documented as a coastal and island-dwelling species in Myanmar, with its known distribution largely restricted to the southern regions. Here, we report a significant northward and inland range extension of *A. fuciphagus* into Kachin State, Northern Myanmar. The records are based on systematic observations conducted from October 2023 to December 2025 at Mohnyin University and Polytechnic University, Myitkyina. Species identification was established through diagnostic morphological characters and nesting ecology, specifically the presence of edible nests composed entirely of hardened white saliva, a distinct pale rump band, and unfeathered tarsi. Our findings confirm the successful colonization of inland anthropogenic habitats by this species, extending its known range far beyond the previously recognized coastal limits in Myanmar. This record provides a crucial update to the species' distributional biogeography and emphasizes the importance of long-term monitoring of swiftlet populations in inland Southeast Asia.

Keywords: *Aerodramus fuciphagus*, edible bird's nest, Kachin State, northern Myanmar, range extension, White-nest Swiftlet

INTRODUCTION

Swiftlets (Apodidae) are colonial, aerial insectivorous birds widely distributed across tropical Southeast Asia (Abdullah *et al.*, 2025). Among them, species of the genus *Aerodramus* are of particular ecological and economic importance due to their production of edible bird's nests, notably *Aerodramus maximus* and *A. maxius* (Jamalluddin *et al.*, 2019; Zulkefle *et al.*, 2024). In contrast, the Himalayan Swiftlet (*A. brevirostris* Horsfield, 1840) constructs nests incorporating plant material (Wang *et al.*, 2013) and is the only swiftlet species traditionally recorded from Northern Myanmar.

Swiftlets typically thrive in tropical, humid environments (approx. 90% humidity and 28°C to 30°C). As aerial insectivores, they inhabit caves or dark, humid anthropogenic structures for roosting and reproduction (Dai *et al.*, 2021; Zulkefle *et al.*, 2024).

In Myanmar, the White-nest Swiftlet *A. fuciphagus*, has historically been documented only in Southern coastal areas, especially the Tanintharyi Region and the Myeik Archipelago (BirdLife International, 2025). Here, we present the first confirmed inland and northward occurrence of *A. fuciphagus* in Kachin State, Myanmar.

MATERIALS AND METHODS

Study Sites

Observations were conducted at two sites in Kachin State, Northern Myanmar: Polytechnic University, Myitkyina (Latitude: 25.3872°N, Longitude 97.3075°E) and Mohnyin University (Latitude: 24.7861°N, Longitude: 96.3897°E) (Figure 1). Initial field observations commenced in October 2023 at Mohnyin University and in January 2024 at Polytechnic University, Myitkyina.

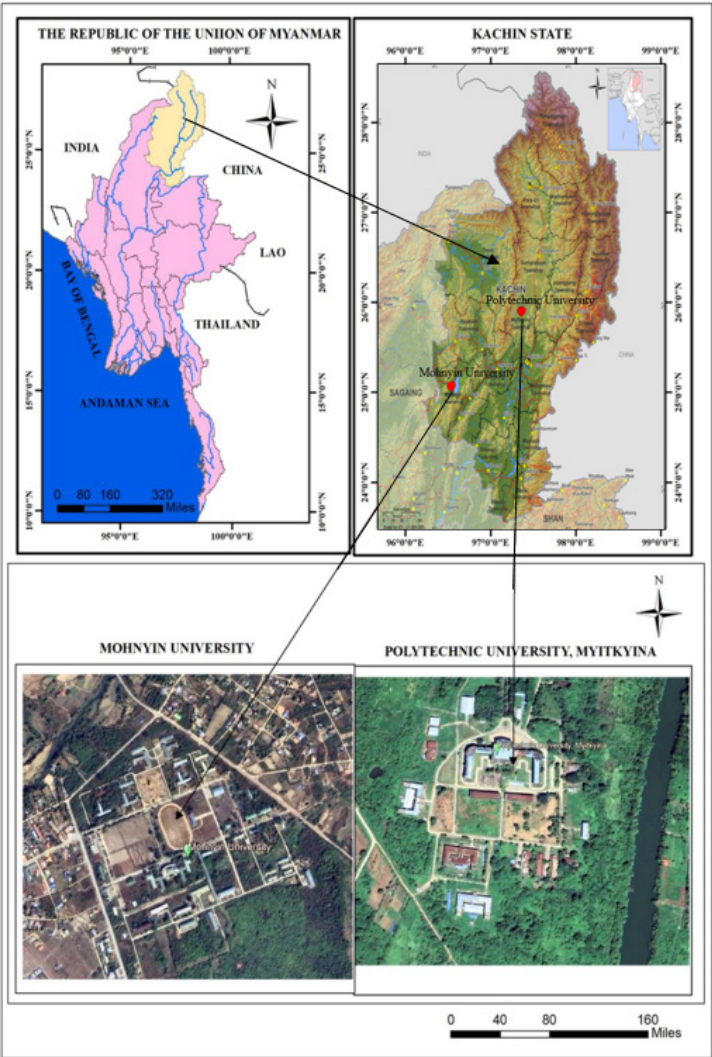


Figure 1. Map showing the new distribution records of White-nest Swiftlet, *A. fuciphagus* in Mohnyin and Myitkyina, Kachin State, Northern Myanmar.

Study methods

During the early observation phases (late 2023 to 2024), swiftlet individuals were sighted at both locations; however, positive species-level identification could not be confirmed due to the absence of active nests and diagnostic characters. In December 2025, active nesting sites were detected at both study locations. Species identification was subsequently confirmed as the White-nest Swiftlet (*A. fuciphagus*) based on nest composition (pure white edible nests) and diagnostic morphological traits. Following identification, systematic population and nest counts were conducted in December 2025 using the direct visual count method. At both sites, the maximum total number of individual birds present during peak roosting hours (early morning and late evening) and the total number of active nests within the accessible building structures were recorded. Species identification was confirmed using standard taxonomic keys and morphological reference guides for Southeast Asian birds (Robson, 2015). Diagnostic morphological characters evaluated in situ included the presence of an unfeathered tarsus, a pale brownish-grey rump band, and sooty-brown upperparts. In addition, nests composed entirely of hardened white saliva without plant material or feathers were used to confirm identification as *A. fuciphagus* (Cranbrook *et al.*, 2013).

RESULTS AND DISCUSSION

Established breeding colonies of swiftlets were recorded at both study sites. At Polytechnic University, Myitkyina approximately 130 individuals and 15 nests were observed, mainly within the upper floor of the main academic building. At Mohnyin University, a large colony of approximately 200 individuals and 51 nests were recorded, with the principal aggregation located in the northern room of the Sports Grandstand and additional nest at Sakayar Hostel (Figure 2).

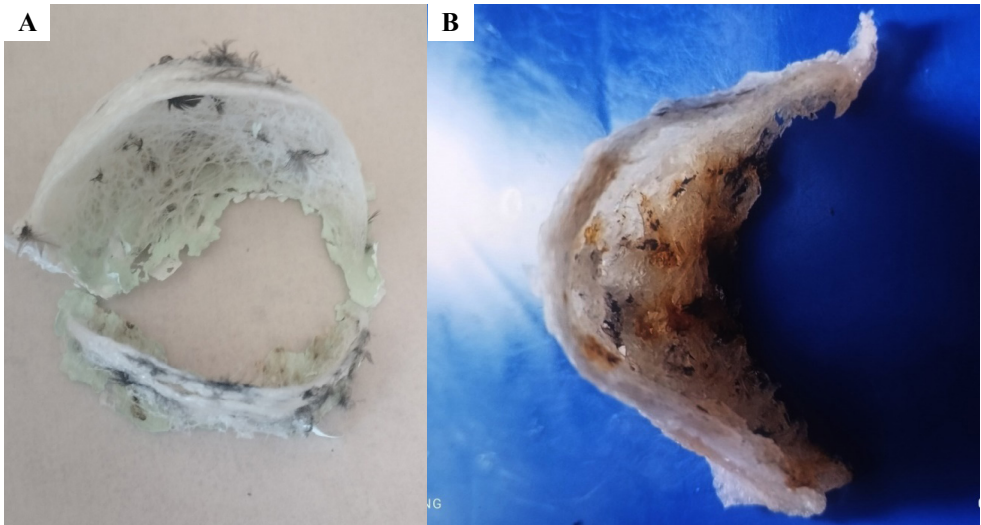


Figure 2. A, A white edible nest of *A. fuciphagus*, collected from Mohnyin University, Kachin State, Myanmar; B, Nest of *A. fuciphagus* attached to the interior structure of a building at Polytechnic University, Myitkyina, Kachin State, Myanmar.



Figure 3. A, Dorsal view of *A. fuciphagus*, showing the diagnostic pale brownish-grey rump band; B, Completely unfeathered tarsus of *A. fuciphagus*, a key diagnostic character; C, Overall plumage and body dimension (11–12 cm) of *A. fuciphagus*.

Identification as *A. fuciphagus* was confirmed based on the following diagnostic characters: (i) nest composed almost entirely of hardened white saliva forming a translucent lattice structure; (ii) presence of a distinct pale brownish-grey rump band; (iii) completely unfeathered tarsi; and (iv) sooty-brown upperparts with a body length of approximately 11–12 cm (Figure 3).

This record of *A. fuciphagus* in Kachin State represents a significant northward and inland extension of the species' known range in Myanmar. Several factors may have facilitated the expansion of this species into northern inland areas, including movement along major river systems such as the Ayeyarwady River corridor, which provides continuous foraging habitats and navigational pathways. Furthermore, previous records documenting its presence in northern and western Thailand provide crucial baseline context for comparing current distribution patterns (Aowphol *et al.*, 2008) as well as historical island restricted records from the Andaman and Nicobar Islands in India (Sankaran, 1998) provide crucial baseline context for comparing current distribution patterns. These records suggest a broader, ongoing regional range expansion across continental mainland Southeast Asia. Additionally, the rapid proliferation of man-made swiftlet houses and the availability of suitable anthropogenic structures in urban areas may have enabled the species to gradually colonize and establish breeding colonies in northern inland Myanmar. The presence of established breeding colonies at both Myitkyina and Mohnyin indicates successful adaptation to inland anthropogenic environments, far from the species' traditionally recognized coastal habitats. During the study period, field observations suggested an increase in both the number of individuals and active

nests. In addition, nesting activity expanded into adjacent rooms within buildings at Mohnyin University. These observations suggest that the breeding colony is becoming established and may be increasing in size in these newly colonized inland anthropogenic habitats. However, long-term monitoring is required to confirm population trends and assess the ecological implications of this range expansion.

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