Fledgling success in a Painted Stork *Mycteria leucocephala* colony in Rajasthan, India

The Painted Stork *Mycteria leucocephala* is a widespread resident wetland bird of the Indian Subcontinent (Ali & Ripley 1987). Painted Storks are largely piscivorous, and occupy a high trophic level in aquatic food chains (Kalam & Urfi 2008). Here we report on the nesting ecology and fledging success of a colony of Painted Storks.

The Mataji pond of Chawandiya village (25.190°N, 74.460°E) is likely the largest breeding site for Painted Storks in Bhilwara District, Rajasthan, India. Many Babool *Vachellia nilotica* trees near this pond offer excellent nesting sites for the birds. From July 2023 to January 2024, we opportunistically tracked all 187 stork nests from nest initiation in July to when all fledglings left the nest in late January (Fig 1). We followed all guidelines in Barve et al. (2020) for our observations.



Fig 1: Phenology of Painted Stork nesting at Mataji pond 2023-2024

Most nests were located in the upper canopy of the nesting tree. 84% (157/187) of the nests had three hatchlings while the rest 1-2 hatchlings. Potentially due to staggered egg laying, there appeared to be a lag of 4-5 days in the hatching of all eggs. Based on visual estimation of nestlings from four nests, in nests with two or three nestlings, the smallest nestling was about one-third of the size of the largest nestling around 15 days after the first nestling hatched. Thus, based on size, the first, second, and third nestlings were referred to as large, medium and small respectively. In the nestling stage, both parents fed fish to the nestlings. The amount of food provisioned differed between the largest and smallest nestlings. Out of 157 nests with three nestlings, we directly observed the adults feeding the small nestling in only 45 (29%) of the nests. Most food brought by the parents was delivered to the large and medium nestlings due to their larger size and stronger begging. Table 1 outlines all documented metrics for the colony.

Table 1. Metrics of nesting biology of Painted Storks at Mataji pond in 2023–24	
Metric	Observation
Number of Nests	187
Number of nests with two nestlings	30
Number of nests with three nestlings	157
Total number of nestlings across all nests	521
Total number of dead nestlings	112 (21% of hatchlings)
Fledging success	409 (79% of total hatchlings)



36. Remains of a dead nestling in Painted Stork nest.



37. A nestling death due to ejection from the nest.

As the water levels in the Mataji pond dropped and prey likely dwindled, the large and medium offspring followed the parents to the foraging grounds leaving the small nestlings to starve in the nest. Out of the 157 nests with three nestlings that we tracked, only 45 fledged all three young. We found dead nestlings in 112 nests **[36]**. Several nestlings were also pushed out of the nest by the larger fledglings **[37]**. Dead nestlings were observed being scavenged by House Crow *Corvus splendens*. We are unsure why the parents were unable to raise all three nestlings in most cases. However, siblicide, infanticide, and brood reduction due to resource availability, are well known causes of nestling mortality in many birds in general, and other storks such as White Stork *Ciconia ciconia* and Black Stork *C. nigra* in particular (Mock 1987; Zieliński 2002; Jovani & Tella 2004; Komdeur 2005; Djerdali et al. 2016).

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The Blyth's Swift *Apus leuconyx* from Jammu & Kashmir, India

On 17 March 2024, at about 0830 h, while birdwatching near Temple Kanjli between Malhar and Dhaggar (32.728°N, 75.685°E; 2,527 m asl) in Kathua district, Jammu & Kashmir, India, HK observed about thirty *Apodidae* swifts flying in the sky. A few photos were clicked. To ascertain the bird's identity, the photographs were posted on the *Ask IDs of Indian Birds* Facebook group. The bird was identified in the group as Blyth's Swift *Apus leuconyx* [38].



38. Blyth's Swift, Kathua district, Jammu & Kashmir.

Ali & Ripley (1983) describe this bird "as a deeply fork-tailed swift, blackish brown above with a broad white rump-patch; squamated or mottled black and white below, with whitish chin and throat." The forked tail is not visible in the above photograph because of the angle of sight. The squamation (mottling) on the underparts is also not clearly visible as the photo was taken from afar. However, the white rump-patch and the whitish chin and throat are clearly visible. Little Swift *A. affinis* can look similar because it too has a white rump-patch, but that species has a square tail (though not possible to compare here) and an obvious rounded white throat-patch.

Blyth's Swift occurs in the breeding season along the outer Himalayas between c.600 and c.3,600 m asl from Murree Hills (Pakistan) and Kashmir eastwards to the north-east including Nepal, Sikkim, Assam Hills and Bhutan (Ali & Ripley 1983; Leader et al. 2023). The breeding period is from February to August, both months included (Baker 1934).

Although Blyth's Swift has been included in the checklist of birds of Jammu & Kashmir, no photographic evidence or specimen exists (Kichloo et al. 2024). Its presence in the region, however, is supported by ornithological literature. Lawrence (1895) was the first to suggest that it is likely to occur in Kashmir, but the earliest recorded mention was by Ward (1907). Osmaston (1927) noted occasional sightings of the species in flight at higher elevations in the Great Himalayan Range. Bates & Lowther (1952) included it in the breeding birds of Kashmir. More recently, Price & Jamdar (1990), recorded the species in the Overa Wildlife Sanctuary in Anantnag district, while Awan et al. (2010, 2012) documented it from Muzaffarabad in Pakistan Administered Kashmir. Grimmett et al. (2011) and Rasmussen & Anderton (2012) included Jammu & Kashmir in this species' summer/breeding range on their distribution maps. Before the present record, the most recent observation was from Aru Valley (above Mondlan) in Anantnag district on 24 July 2022 (Eaton et al. 2022). The present sighting, therefore, is the first photographic record of Blyth's Swift in Jammu & Kashmir.

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