# A MYSTERIOUS SWIFT Apus sp.

Fulvio Fraticelli <sup>(1)</sup>, Mariangela Monti <sup>(2)</sup> & Simona Patrizi <sup>(3)</sup>

Stazione Romana Osservazione e Protezione Uccelli, Piazza Margana 40, 00186 Roma <sup>(1)</sup> f\_fraticelli@hotmail.com\_http.//orcid.org/0000-0003-3999-3663 <sup>(2)</sup> lunagray@libero.it <sup>(3)</sup> patrizisimona71@gmail.com

**Riassunto – Un rondone** *Apus* **sp. misterioso.** Viene descritto un Rondone *Apus* **sp.** fotografato a Roma nell'aprile 2021 la cui determinazione specifica ha coinvolto molti specialisti senza però arrivare a una conclusione certa. La specie più probabile è *A. caffer*, anche se alcuni caratteri non coincidono, e la decisione della Commissione Ornitologica Italiana di non validare l'osservazione per documentazione insufficiente appare la più corretta.

On April 5, 2021, at 9:40 AM, Mariangela Monti, accompanied by her husband Maurizio Cervoni, was photographing Common Swifts Apus apus that were flying in front of the balcony of their residence on Via Acqua dei Corsari in Rome. Her attention was drawn to an individual that was noticeably smaller and, due to its white rump, could have been mistaken for a House Martin Delichon urbicum. Unfortunately, they were able to capture only a single photograph (Fig. 1) because the bird quickly disappeared behind the building after a direct flight. Upon examining the photo, it was clear that the individual in question was not a House Martin but an unidentified Apus species with a distinct white rump. The photo was sent to Simona Patrizi, who, unable to make a definitive identification but suspecting it might be an accidental species, forwarded it to Fulvio Fraticelli. It quickly became apparent that the bird exhibited characteristics of the White-rumped Swift Apus caffer, though some features resembled those of Horus Swift Apus horus, a suspicion confirmed by Andrea Corso, to whom the photo was also sent. The sighting was submitted to the Italian Ornithological Committee without proposing a specific species, and the record was not accepted due to insufficient documentation (Fulco & Liuzzi, 2023).

## **Description of the individual**

Behavior: Unlike the Common Swifts present, the observed individual exhibited a fast and direct flight, which caused it to quickly disappear from view.

General Structure and Size: Although it is challenging to accurately assess the size of swifts in flight (Jansen & Driessens, 2023), the observed individual was noticeably smaller than the Common Swifts flying nearby. Additionally, the body did not appear particularly slender.

Wing shape: The silhouette and coloration of a swift in flight are difficult to assess (Jansen & Driessens, 2023), especially when, as in this case, there is only a single photograph. These characteristics can change rapidly depending on wingbeat, light incidence, and the flexibility of the feathers. Despite these limitations, the wings do not appear particularly long and narrow.



**Figure 1.** *Apus* sp. photographed in Rome on April 5, 2021 (Photo by M. Monti).

Underwing: The underwing plumage appears fairly uniform, with only a slight pale band formed by the tips of the median coverts. The secondaries appear translucent, and no pale trailing edge are visible, though a very thin lighter trailing edge may be present on the tips of the tertials.

Head: The extent of the white on the cheek is difficult to assess due to the shadow of the right wing and likely overexposure from the bright light. It seems that the white may even extend past the beak toward the forehead. The overall head coloration cannot be reliably assessed due to the angle and lighting conditions, but there appears to be no eyebrow stripe or darker spot behind the eye.

Throat: The white patch on the throat has clearly defined edges and a rounded shape on the side toward the chest.

White rump: As far as can be seen, the white on the rump does not extend far onto the flanks, reaching only to the base of the outermost rectrices and stopping before the wing's attachment to the body.

Tail shape: The tail does not appear particularly long and is moderately forked.

Rectrices: The T5 (the outermost rectrix) extends only slightly beyond the T4 and has a pointed tip, whereas the other rectrices have more rounded tips.

In the *Apus* genus, the following species exhibit a white rump (Chantler & Driessens, 1995): the White-rumped Swift *A. caffer*, the Horus Swift *A. horus*, the Little Swift *A. affinis*, the House Swift *A. nipalensis*, and the Pacific Swift *A. pacificus*. The latter species has recently been divided into three taxa: the Salim Ali's Swift *A. salimalii*, Blyth's Swift *A. leuconix*, and Cook's Swift *A. cooki* (Leader, 2011; Päckert *et al.*, 2012; Leader *et al.*, 2020). There is also the possibility that the observed bird could be a partially leucistic individual of *A. apus* or *A. pallidus*, or a hybrid between *A. caffer* and *A. affinis* (Jansen *et al.*, 2023).

### Comparison with possible species

Apus caffer: The overall slender appearance and the shape of the long, narrow wings characteristic of *A. caffer* do not seem to match the individual under study. The absence of a pale trailing edge on the secondaries, though rare, can occur in *A. caffer*, while a pale trailing edge on the tertials is always present in this species. The white extending to the rear flanks, as seen in the studied individual, occurs in a small percentage of *A. caffer* individuals. The white throat patch is sharply defined, which is typical of *A. caffer* (Jansen & Driessens, 2023). Despite some discrepancies, this species is the most likely candidate for the individual in question, a view also supported by Driessens (*in litt.*). The likelihood that it is *A. caffer* is further increased by the recent nesting of this species in Calabria (Pucci *et al.*, 2022).

Apus horus: Amezian (2018) hypothesized that A. horus could potentially reach the Western Palearctic due to its dispersal capabilities. A colony of this species was later found in northern Senegal (Piot & Bacuez, 2021), in 2019, an individual was observed in the Netherlands (Jansen & Driessens, 2024), and in 2022, a probable individual was observed in the Ireland (Mullarney et al., 2024). In A. horus, the underwing shows a pale band formed by the tips of the median coverts, although this feature is variable. The pale tips of the smaller and marginal coverts contribute to a lighter appearance of the entire underwing, which differs significantly from that of the individual observed in Rome. The white rump extending to the rear flanks, as seen in the studied bird, is most common in A. horus. The light head coloration is another diagnostic feature for A. horus, but it is impossible to assess this from the photo of the Rome individual. The white throat patch in A. horus rarely has a well-defined border. The T5 in this species, when the tail is spread, is nearly equal in length to T4 (Jansen & Driessens, 2023). As observed in other species of the Apus genus (Ahmed & Adriaens, 2010; Jansen & Driessens, 2023) and Tachymarptis (Bulgarini et al., 1995), there may be considerable individual variability not yet fully understood, leading to the hypothesis of subspecies within A. caffer and A. horus (Brooke, 1971). However, these two species are currently considered monotypic (Gill et al., 2024).

Apus affinis: This taxon, which is possibly conspecific with A. nipalensis (Päckert et al., 2012), can be ruled out due to its square, non-forked tail.

Apus nipalensis: Despite its primarily eastern distribution, the possibility of A.

*nipalensis* appearing in the Western Palearctic cannot be excluded, considering it has been found in British Columbia (Szabo *et al.*, 2017) and has shown increased dispersal capabilities in recent years (Kyne *et al.*, 2022; Jackett, 2024). Jansen (*in litt.*) suggested that the individual in question might belong to the *A. affinis/nipalensis* complex, but the pointed tip of the T5 does not seem typical for this taxon, as this feather should appear even shorter than T4 when the tail is spread (Jansen & Driessens, 2023). It is also worth considering that *A. nipalensis* is divided into four subspecies, with characteristics still needing precise definition, and that tail shape and rectrix tips should be distinguishing features (Chantler & Driessens, 1995).

*Apus pacificus* and related species: This group of species can be excluded due to their significantly larger size compared to the individual observed.

Leucistic *Apus apus* or *Apus pallidus*: The possibility that the bird is an individual with anomalous coloration from either of these two species is highly unlikely due to both the size and the clearly defined borders of the white patches, which are not typically seen even in aberrant individuals of other species (Jansen & Driessens, 2023).

*Apus caffer* x *Apus affinis* hybrid: Between 2015 and 2019, two hybrid individuals between these species were observed in southern Spain. Many characteristics of these hybrids resemble the Rome individual, such as the well-defined throat patch, tail shape, and the pointed T5 compared to the other rectrices. However, the coloration of the underwing is noticeably different (Jansen *et al.*, 2023).

### Age determination

Determining the age of this individual is extremely challenging due to the limited knowledge of how long juvenile plumage is retained in many swift species. However, based on available data for *A. apus* and *A. pallidus* (Larsson, 2018; Blasco-Zumeta & Heinze, 2023), the T5 feathers, which are not particularly long, might suggest a young bird, as also hypothesized by Driessens (*in litt.*). On the other hand, the clearly pointed shape of the T5 tips suggests it could be an adult, possibly a second-year individual.

## Conclusions

From a probabilistic standpoint, the most plausible species to which the observed individual in Rome might belong is *Apus caffer*, as also suggested by Driessens (*in litt.*), although some morphological features do not match perfectly. Additionally, the possibility of it being a *A. caffer*  $\times$  *A. affinis* hybrid cannot be entirely ruled out, as also suggested by Driessens (*in litt.*) in this case, but the likelihood is extremely low given the known rarity of hybridization between these species. The final hypothesis is that it could be *A. nipalensis*, as also suggested by Jansen (*in litt.*), a species for which detailed descriptions of its various subspecies are still lacking. Therefore, the decision of the Italian Ornithological Committee not to validate the sighting, without assigning the individual to any specific species, seems to be the most appropriate at this time.

Acknowledgements – We sincerely thank Gerald Driessens and Justin Jansen for their invaluable advice, Andrea Corso for his input during the identification process, Fabrizio Bulgarini for his critical review of the text, and Alessandro Montemaggiori for the adjustments to the photographic image.

### REFERENCES

- Ahmed R. & Adriaens P., 2010. Common, Asian Common and Pallid Swift: colour nomenclature, moult and identification. Dutch Birding, 32: 97-105.
- Amezian M., 2018. Horus Swift: a potential Western Palearctic vagrant. Website: https://tinyurl. com/2p8e7xec. [Accessed 19 August 2024]
- Blasco-Zumeta J. & Heinze G.-M., 2023. Identification atlas of the continental birds of Southwestern Europe. Tundra Ediciones, Castellón.
- Brooke R.K., 2071. Geographical variation in the swifts *Apus horus* and *Apus caffer* (Aves: Apodidae). Durban Museum Novitates, 9: 29-38.
- Bulgarini F., Fraticelli F. & Visentin M., 1995. Belly-patch pattern of Alpine Swift. British Birds, 88: 335.
- Chantler P. & Driessens G., 1995. Swifts. Pica Press, Mounfield.
- Fulco E. & Liuzzi C., 2023. Italian Ornithological Commission (COI) Report 31. Avocetta, https:// doi.org/10.30456/AVO.2023\_report\_COI
- Gill F., Donsker D. & Rasmussen P. (Eds), 2024. IOC World Bird List (v14.2). https://doi.org/10.14344/ IOC.ML.14.1.
- Jackett N.A., 2024. Retrospective weather analysis explains regular occurrence of House Swifts '*Apus nipalensis*' and swiftlets '*Aerodramus*' spp. in North-western Australia. Australian Field Ornithology, 41: 70-76.
- Jansen J. & Driessens G., 2023. Horus Swift: identification, plumage variation and distribution. Dutch Birding, 45: 73-116.
- Jansen J. & Driessens G., 2024. Horusgierzwaluw op Schiermonnikoog in september 2019. Dutch Birding, 46: 145-155.
- Jansen J., Driessens G. & Moreno C., 2023. White-rumped x Little Swift hybrids at Chipiona, Spain, in 2015-19. Dutch Birding, 45: 244-250.
- Kyne P.M., Davies C.-L. & Rawsthorne J., 2022. Increasing occurrence of House Swifts *Apus nipalensis* in Australia and an influx event to Darwin, Northern Territory. Corella, 46: 68-75.
- Larsson H., 2018. The identification of juvenile Common and Pallid Swifts. British Birds, 111: 310– 322.
- Leader P. J., 2011. Taxonomy of the Pacific Swift *Apus pacificus* Latham, 1802, complex. Bulletin of British Ornithological Club, 131: 81-93.
- Leader P. J., Zyskowski K., Bird B., Khot R., van Grouw H. & Praveen J., 2020. Status of 'Fork-tailed Swift' *Apus pacificus* complex in India. Indian Birds, 16: 135-139.
- Mullarney K., Persson S., Driessens G. & Jansen J., 2024. The North Bull Wall 'white-rumped' swift in December 2002 could it have been a Horus Swift? Dutch Birding, 46: 318-320.
- Päckert M., Martens J., Wink M., Feigl A. & Tietze D.T., 2012. Molecular phylogeny of OldWorld swifts (Aves: Apodiformes, Apodidae, *Apus* and *Tachymarptis*) based on mitochondrial and nuclear markers. Molecular Phylogenetics and Evolution, 63: 606-616.
- Piot B. & Bacuez F., 2021. A major range extension of Horus Swift *Apus horus*, north-west to Senegal. Bulletin of African Bird Club, 28: 206-212.
- Pucci M., Candelise G. & Storino P., 2022. Prima nidificazione di Rondone cafro *Apus caffer* in Italia. Alula, 29: 140 143.
- Szabo I., Walters K., Rourke J. & Irwin D.E., 2017. First Record of House Swift (*Apus nipalensis*) in the Americas. The Wilson Journal of Ornithology, 129: 411–416.