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Biodiversity Record: First specimen of the Eurasian sparrowhawk from Singapore

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Subject: Eurasian sparrowhawk, Accipiter nisus (Aves: Accipitriformes: Accipitridae).

Subject identified by: Yong Chee Keita Sin and Yen Yi Tan.

Location, date and time: Singapore Island, Pasir Panjang Road, Mapletree Business City (1.2751456° N, 103.7978072° E); 10 November 2022; 1236 hrs.

Habitat: Urban. Among concrete high-rise buildings with glass façades.

Observer: Yen Yi Tan.

Observation: A dead female example (Figs. 1–3) was discovered at ground level along the northern façade of a concrete highrise building by a member of the public and collected by the observer. The specimen appeared intact without visible external injuries, bleeding, decomposition or scavenger damage. It probably died on the same morning.

Description of plumage: Head brown with bold black streaks on crown, thin white supercilium, cheeks white with brown streaks, iris yellow, lores white. Bill greyish-black with yellow cere, throat light brown with thin brown streaks. Upperparts (Fig. 1) dark brown with rufous edges to wing coverts, dark brown nape interspersed with black and rufous feathers that diffuse posteriorly into a uniform brown with faint rufous tips. Underparts (Fig. 2) white with narrow brown v-shaped streaks on breast and irregular brown bars on the belly, vent white. Upper wing concolourous with feather fringes showing gradation from rufous to rufous-white across the lesser, median and greater upper wing coverts. Lesser underwing coverts white with small v-shaped spots, median and greater underwing coverts with similar irregular brown bars as belly but slightly thicker. Uniform dark brown bars throughout primaries and secondaries. Faint, narrow black subterminal bar on secondaries. The wings have a "6-fingered" appearance due to elongated primary feathers P5 to P10 (Fig. 3). Upper tail (Fig. 1) concolourous with upperparts (Fig.1), under tail (Fig. 2) white, both exhibiting six narrow black bars.

Dimensions: wing chord: 250 mm; tail length: 198 mm; bill-to-skull: 21.9 mm; tarsus 64.9 mm.

The carcass was prepared by Yen Yi Tan at the Avian Evolution Laboratory, in the Department of Biological Sciences, at the National University of Singapore. Its neck was found to be disarticulated. The specimen will be deposited at the Lee Kong Chian Natural History Museum at the National University of Singapore, under the accession number: ZRC 3.37053.

Remarks: The plumage features and morphometrics suggest a juvenile Eurasian sparrowhawk, which is a vagrant to the South-east Asian region (Ferguson-Lees & Christie, 2001; DeCandido et al., 2014; Eaton et al., 2021). This species is significantly larger than the common Japanese sparrowhawk, *Accipiter gularis* (for size comparison, see Fig. 2). This is only the sixth confirmed record of the Eurasian sparrowhawk in Singapore (Singapore Birds Project, 2022), and is the first record in the country to be represented by a preserved specimen.

From our observations, the Eurasian sparrowhawk carcass had a disarticulated neck, and was discovered in a location with multiple tall glass buildings. These suggest that window collision was likely the cause of death. Research into urban avian mortality in Southeast Asia is still in its infancy (Low et al., 2017; Tan et al., 2017) and continued efforts to collate such data will be critical for a better understanding of the phenomenon.



Fig. 1. Upperparts of the Eurasian sparrowhawk with a 30-cm ruler for scale. (Photograph by: Yen Yi Tan).



Fig. 2. Underparts of the Eurasian sparrowhawk (top) with the carcass of a juvenile female Japanese sparrowhawk, *Accipiter gularis* (below), also collected in Singapore by the Avian Evolution Laboratory, for size comparison. Scale ruler = 30 cm. (Photograph by: Yen Yi Tan).



Fig. 3. Right wing of the Eurasian sparrowhawk with views of the (A) upper surface and the (B) under surface. (Photographs by: Yen Yi Tan).

Literature cited:

DeCandido R, Nualsri C, Siponen M, Sutasha K, Pierce A, Murrau J & Round PD (2014) Flight identification and plumage descriptions of six *Accipiter* species on southbound migration at Khao Dinsor, Chumphon province, Thailand. BirdingASIA, 21: 52–62.

Eaton JA, van Balen S, Brickle NW & Rheindt FE (2021) Birds of the Indonesian Archipelago: Greater Sundas and Wallacea. Second edition. Lynx Edicions, 536 pp.

Ferguson-Lees J & Christie DA (2001). Raptors of the world. Christopher Helm, London, 992 pp.

Low B, Yong D, Tan D, OwYong A & Chia A (2017) Migratory bird collisions with man-made structures in South-east Asia: a case study from Singapore. BirdingASIA, 27: 107–111.

Singapore Birds Project (2022) Singapore Bird Database. https://records.singaporebirds.com/record/ (Accessed on 22 November 2022)

Tan DJ, Yong DL, Low BW, OwYong A & Chia A (2017) Anthropogenic sources of non-migratory avian mortalities in Singapore. The International Journal of Tropical Veterinary and Biomedical Research, 2: 17–27.