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SHORT NOTE

First record of the Eurasian tree sparrow (*Passer montanus*) from Buka, Autonomous Region of Bougainville, Papua New Guinea, and status of the species in Melanesia

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The Eurasian tree sparrow (*Passer montanus*) is widespread in its native range in Eurasia and is also found as an introduced species elsewhere, including North America and Australia (Summers-Smith 1995; Barlow *et al.* 2020). It has spread into the insular South Pacific in Micronesia (Clement *et al.* 1993) and in recent years into Melanesia. It is also present on American Samoa (American Samoa Department of Marine & Wildlife Resources, 9 Sep 2022, www.facebook.com/asdmwr; A. Harmon, 2024, ebird.org/checklist/S163378908). Here, I report the first record from Buka, Autonomous Region of Bougainville, Papua New Guinea, and summarise the current status of the species in Melanesia.

I visited Buka and Bougainville Island in November 2022 and January 2024. Buka is the gateway to the region, with daily flights to Port Moresby and Rabaul, and a regular ferry service to the latter. I was aware of the potential presence of Eurasian tree sparrows there and looked for them in 2022 and 2024, but it was not until the last day of my second visit that I saw them. On 25 Jan 2024 I found several tree sparrows near Buka airport. I first saw a flock of eight individuals, and shortly after they had departed, another five sparrows approached from the opposite direction to where the first flock had flown, making a total of 13

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Figure 1. Eurasian tree sparrow on a power pole near Buka Airport, 25 January 2024.

individuals (Fig. 1). The sheer number of individuals suggests the successful establishment of a new local population and even breeding. The birds were found in urban habitat, a mixture of small houses and gardens with scattered trees. They were busy and active, perching only briefly in bushes and on power poles or wires before flying away.

This is the first record of the Eurasian tree sparrow from the North Solomons region of Papua New Guinea. The species is currently spreading into the insular South-West Pacific. It was recorded on Biak Island, Indonesia, in May 1989 (Holmes 1989), followed by records from Indonesian New Guinea in Amamapare in 1997 (Holmes & Gregory 1997) or 1998 (van Balen *et al.* 2011) and Sorong 2004 (Hornbuckle & Merrill 2004). By 2008 it had reached Port Moresby (J. Raven, 2008, ebird.org/checklist/S56079996), Mount Hagen (M. Edgecombe, 2008, ebird.org/checklist/S122037367; P. Gregory, 2008, ebird.org/checklist/S136004759), Manokwari (R. Chase, 2008, ebird.org/checklist/S7224535), Jayapura (e.g. R. Chase, 2008, ebird.org/checklist/S7237129) and Wamena (e.g. A. Whitlock, 2008, ebird.org/checklist/S47942931). The Eurasian tree sparrow is now present in many towns in both mainland Papua New Guinea and the Indonesian part of the island, including some very remote places with no road access, but is largely absent from rural areas (www.ebird.org).

In the Bismarck Archipelago, it was first recorded on New Britain around Kimbe and Hoskins in July 2000 (S. Conklin, 2000, ebird.org/checklist/S55449198, ebird.org/checklist/S55463366) and again in April and June 2007 (Gregory 2009). It is now also present in and around Rabaul, New Britain, since at least March 2019 (G. Wood, 2019, ebird.org/checklist/S53273498), on Lihir Island since at least October 2019 (A. Babych, 2019, ebird.org/australia/checklist/S61060114), and on New Ireland. On the latter, records began in July 2022 in and around Kavieng (K. Markham, 2022, ebird.org/checklist/S115931638), but the species has since been recorded from other locations on the island. Recent records have also come from Manus, Lavongai, Mussau and even remote Tench Island (R. Bayldon, 2024, ebird.org/checklist/S175233490, ebird.org/checklist/S175122249, ebird.org/checklist/S175010352; J.C. Mittermeier & E. Cottee-Jones, 2024, ebird.org/checklist/S194603576).

In the Solomon Islands, Eurasian tree sparrows were first noticed at Henderson Airport on Guadalcanal Island, where an individual was observed in September 2004 (Dutson 2010 *in* Tarburton 2024). The species is now well established on the central north coast of the island (Butcher *et al.* 2020). Recent records have also come from Buala, Isabel Island, in 2018 (S. Brady, J.M. McCullough & X. Mapel, 2018, ebird.org/checklist/S48935153; L. DeCicco, 2018, ebird.org/checklist/S47582913), from Auki (Malaita) (Dutson 2011; P. Gregory, 2023, ebird.org/checklist/S149910835), and from Tulagi in 2019 (Butcher *et al.* 2020).

In Vanuatu, it has been well established around Luganville on Santo Island since at least 2021 (R. Macalister, 2021, ebird.org/checklist/S84313767).

It has not yet been recorded from New Caledonia, where the house sparrow (*Passer domesticus*) is widespread (Dutson 2011).

These introductions were almost certainly accidental, although intentional translocations cannot be ruled out. However, it is not an attractive species for the cage bird trade (although it is part of it in Indonesia (e.g. Chng *et al.* 2018)) and is usually considered an agricultural pest, making deliberate transport and release unlikely. Although several authors have suggested that the species usually arrived by ship (e.g. Holmes & Gregory 1997; Beehler & Pratt 2016; Butcher *et al.* 2020), there is some evidence that this may not have been the only mode of transport. Air transport was the only way to reach highland towns such as Wamena and other remote places in the interior of New Guinea (notably Doufu, Pagamba and Pogapa in Western New Guinea; see www.ebird.org). In Port Moresby, the first record was made at Jackson's Airport, and on Guadalcanal the first sighting was made at Henderson Airport. On recently colonised Manus Island, a small breeding population was found at the airport (J.C. Mittermeier & E. Cottee-Jones, 2024, ebird.org/checklist/S194603576). Small birds have been found in the cabin of international and domestic passenger flights (e.g. media reports of a small bird (allegedly a sparrow) in the cockpit of a flight from Bahrain to Kochi on 15 July 2022; a house sparrow in the cabin of a Korean Airlines flight in Seoul on 7 Oct 2009; a hummingbird/sparrow in the cockpit of Delta flight DL1943 from Detroit to Atlanta on 30 Dec 2017). Nevertheless, it seems unlikely that pairs or small groups of sparrows have been transported in the cabin of a passenger flight. However, it is conceivable that they may have been transported within the freight compartment, particularly on civil or military cargo flights, although I am not aware of any formal reports of this.

While ship-assisted dispersal may have played the major role, I would postulate that air transport is responsible for at least part of the spread as previously suggested, e.g. by Temme (1985). In addition, local movements may have contributed, following transport routes up rivers and along roads, particularly those with human agriculture and settlement (e.g. along the coastal highway on New Ireland). Tree sparrows are also capable of crossing open water on their own (Summers-Smith 1995), although they rarely do so and, to my knowledge, this behaviour has not been documented in the tropics.

On Buka Island, the sparrows have also been seen near the airport terminal. They may have arrived on one of the relief flights for those affected by the eruption of Mount Bagana in July 2023, or they may have made their way from the nearby Buka docks after being transported by ship.

Following the extinction of the previously established common myna (*Acridotheres tristis*) in Arawa (Hadden 2004), it is currently the only non-native species in the North Solomons. As with other introduced species, attention should be paid to potential impacts on native birds. As the Eurasian tree sparrow is closely associated with human settlements, the risk of displacing native species is not particularly high. However, potential competition for food in grasslands close to towns and villages cannot be ruled out. The Buka population of the buff-bellied mannikin (*Lonchura melaena bukaensis*), formerly found in the grasslands around Buka Airport, has not been recorded for more than 30 years and is thought to be possibly extinct (Hadden 2004; Dutson 2011). If a small population is still present, any further threat would be of concern. There is currently no evidence of a threat to native species by tree sparrows in Melanesia, but the further spread of this invasive species should be closely monitored, with particular attention paid to interactions with other species such as the various endemic mannikin species (genus *Lonchura*).

The Eurasian tree sparrow is becoming increasingly established in Melanesia, particularly in and around human settlements. However, breeding records are sparse and although breeding can be assumed when the species is well established, some attention should be paid to providing evidence. There is also a lack of observations on how the species has moved to new islands or new locations, which should be given more attention, e.g. by interviewing local people.

As the species continues to expand its range, ornithologists are encouraged to look for it in places where it has not yet been recorded. Munda, Gizo, or Choiseul in the Solomon Islands, and Nouméa, New Caledonia, could be the next stepping stones in the species' ongoing expansion into Melanesia.

LITERATURE CITED

Barlow, J.C.; Leckie, S.N.; Pyle, P.; Patten M.A. 2020. Eurasian tree sparrow (*Passer montanus*), version 1.0. *In:* Billerman, S. M. *(ed.) Birds of the World.* Ithaca, NY, USA, Cornell Lab of Ornithology. https://doi.org/10.2173/bow.eutspa.01.

Beehler, B.M.; Pratt, T.K. 2016. *Birds of New Guinea – distribution, taxonomy, and systematics.* Princeton and Oxford, Princeton University Press.

Butcher, S.C.; Crossland, A.C.; Crutchley, P.; Mugan, N.D.; Simeon, K. 2020. Eurasian tree sparrow (*Passer montanus*) recently established on Guadalcanal, Solomon Islands. *Notornis 67*: 485–487.

Chng, S.C.L.; Krishnasamy, K.; Eaton, J.A. 2018. In the market for extinction: the cage bird trade in Bali. *Forktail 34*: 35–41.

Clement, P.; Harris, A.; Davis, J. 1993. *Finches and sparrow – an identification guide.* London, Helm.

Dutson, G. 2011. *Birds of Melanesia – The Bismarcks, Solomons, Vanuatu and New Caledonia.* London, Helm.

Gregory, P. 2008. *Rondon Ridge Lodge, Western Highlands, Papua New Guinea, eBird checklist.* https://ebird.org/checklist/S136004759.

Gregory, P. 2009. Eurasian tree sparrows (*Passer montanus*) in PNG. *Muruk 9*: 98–99.

Hadden, D. 2004. *Birds and bird lore of Bougainville and the North Solomons.* Alderley, QLD, Dove.

Holmes, D.A. 1989. The tree sparrow reaches New Guinea. *Kukila 4*: 151.

Holmes, D.A.; Gregory, P. 1997. Records of house sparrows in Irian Jaya. *Kukila 9*: 181–182.

Hornbuckle, J.; Merrill, I. 2004. *Eastern Indonesia: Sulawesi, Halmahera, west Irian Jaya, Ambon and Tanimbar, August-September 2004.* http://burung-nusantara.org/wp-content/uploads/2012/07/Indonesia_2004_Hornbuckle-et-al.pdf

Summers-Smith, D. 1995. *The tree sparrow.* Guisborough, Summers-Smith.

Tarburton, M.K. 2024. *Bird checklists for 672 Melanesian Islands: Guadalcanal Island bird checklist, Solomon Islands.* http://birdsofmelanesia.net/solomons8.html/guadalcanal.pdf

Temme, M. 1985. First records of wood sandpiper, ruff and Eurasian tree sparrow from the Marshall Islands. *Atoll Research Bulletin 292*: 23–27.

van Balen, S.; Noske, R.; Supriatna, A.A. 2011. Around the archipelago. *Kukila 15*: 126–143.

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