

---

**Short Note**

**New Locality Record of the Lowland White-eye (*Zosterops meyeri*) in Dumaguete City, Negros Oriental, Philippines: A Potential Range Expansion?**

**Ronie M. DIONSON, Katrina Kaye V. GO, John Aldren N. ROTO, Bernadette G. VASIG and Jean Henri M. ORACION\***

*Department of Biology, Negros Oriental State University, Dumaguete City 6200, Philippines.*

\*Corresponding author email address: [jeanhenri.oracion@gmail.com](mailto:jeanhenri.oracion@gmail.com)

Received 14 September 2024 | Accepted 09 December 2024 | Published 20 December 2024

DOI: <https://doi.org/10.51200/jtbc.v21i.5416>

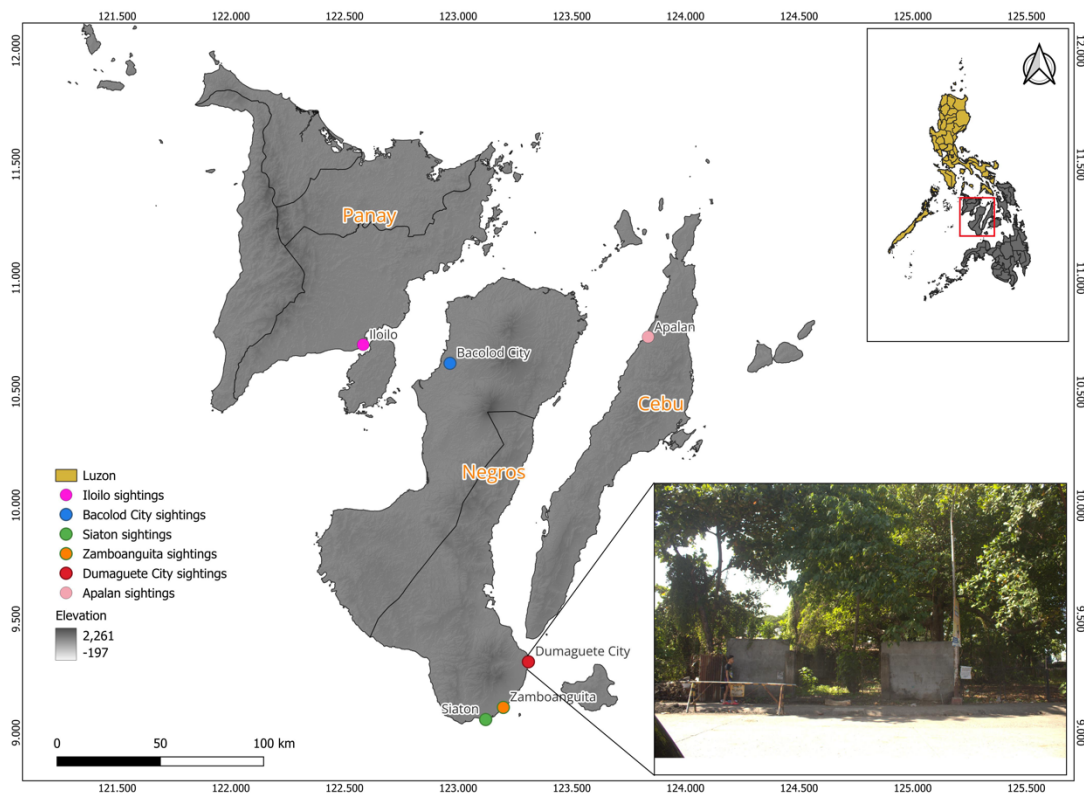
**Keywords:** Urban birds; urban diversity.

White-eyes are birds in the Old-World tropical regions belonging to family Zosteropidae, described to be a sister taxon to the babblers (Borghesio & Laiolo, 2004; Gill, 2020). This family exhibit strong dispersal capabilities that allowed them to colonise and adaptively radiate across many continents and into Afro- and Indo-Pacific tropical regions, where there is also a high endemism of these species (Craig, 1990; Gill, 2020; van Balen, 2008). As a result, White-eyes have occupied various niches, as demonstrated by observations in different habitats, as well as having diverse feeding habits, according to other studies (see Borghesio & Laiolo; Cowles, 2019; Craig, 1990; Dutson, 2008; Mulwa, 2007; Vinciguerra et al., 2023). Because of this, different White-eye species can be seen in high mountainous areas, mid elevation, forest over limestones, agricultural and plantation area, among others.

The Lowland White-eyes (*Zosterops meyeri*) in particular, based on the most recent field guide on the Birds of the Philippines by Allen (2020), is a common resident generally found in Luzon and in nearby islands such as Mindoro, Batanes, Calayan, Lubang, and Leyte. However, it is notably absent in most parts of Visayas, including Negros Island, and there are no records at all from Mindanao Island. Similarly, the latest field guide by Jakosalem et al. (2019), which focuses on Central Visayas, has not listed this bird for Negros, Cebu, and Panay islands. This species commonly inhabits forests and forest edges, scrublands, gardens, areas with bamboos in the lowlands, and even in mangroves in coastal areas. However, some studies have also documented its presence in urban green spaces in Manila (Vallejo, 2009). While Jakosalem et al., (2019) did not list this bird for Negros, a more recent study conducted in Bacolod City, Negros Occidental by Mabugat et al. (2024) encountered this species during their 2022 assessment, marking its presence on the island.

In light of this, this paper presents the first record of the Lowland White-eye in Dumaguete City, Negros Oriental, to provide more support to the information that the encounter of this bird in the urban spaces in Bacolod City was not incidental.

Two individuals were seen during a preliminary survey on urban avian diversity near the coastal area at the port of Dumaguete City (9.312072, 123.309198) (Fig. 1), which is also close to Silliman University, a campus with relatively dense vegetation.



**Figure 1:** Locations of White-eye bird sightings in the Central Visayas and Western Visayas Islands (Negros, Cebu, Panay) of the Philippines. Top right inset shows an overview map of the Philippines. Bottom right inset shows the site where two Lowland White-eyes were seen at Dumaguete City, Negros.

Environmental parameters were measured during the time the birds were observed. The average sound level was 65.5 dB, average temperature was at 30.8 °C, and average humidity was 70.5 %. The location where they were observed is a mixture of vegetation cover, concrete, and other building debris (Fig. 1).

The bird was identified by its characteristic white ring around the eye, brighter yellow throat, and greyish underparts with no yellow stripe on its belly (Fig. 2), and in low elevation which is not a typical characteristic for other White-eyes. In comparison with the two White-eye species also known to occur in Negros, the Yellowish White-eye is recognizable by its predominantly yellowish and greenish colouration. Its underparts are entirely yellow and olive, with no presence of greyish or white plumage, making it clearly distinct from the two. In contrast, the Mountain White-eye, commonly found at elevation of 1000 m asl, has prominent white or greyish underparts, and a yellow stripe along its breast and belly.

Furthermore, the two Lowland White-eye individuals were seen feeding on fruits of the *Macaranga tanarius* (Fig. 2), locally known as binunga. It is a native and pioneer species that usually grows in disturbed areas and is frequently observed in regenerating forests (Galias & Cuevas 2018; Paclibar & Tadosa, 2020). It is a small to medium-sized dioecious tree that has been widely used in reforestation programmes because of its resilience and fast-growing nature (Orwa et al., 2008).



**Figure 2:** Individuals of Lowland White-eye feeding on *Macaranga tanarius* at Dumaguete City, Negros Oriental, in the Philippines.

Given the conditions of where the birds were seen, they can possibly thrive in urban areas. In the past, this bird was not listed in Negros Island, suggesting that, given the superb dispersing capabilities of White-eyes (Vinciguerra et al., 2023; Borghesio & Laiolo), it enabled them to move into the island. In fact, aside from the records presented herein and the one in Bacolod City in 2022, an observation was also made available on the Ebird website in 2024 for the rural municipality of Zamboanguita (see Fig. 1, Burton, 2024). Another observation available on Ebird was in Tabobo Bay, Siaton on the same island where 4 individuals were seen moving around the mangrove area (Chafer, 2024). Many sightings of this bird in Negros and other islands of Panay and Cebu were in nearby coastal or estuarine areas where mangroves are present, which may suggest this bird also has preference to these kinds of habitats (C. Chafer, personal communication, November 21, 2024; Cornell Lab of Ornithology, 2024).

These encounters are so far very new, which could also suggest a recent dispersal of this bird. Based on more recent evidence shared on Ebird in 2023 and 2024 from the neighbouring provinces of Iloilo on Panay Island and Apalan on Cebu Island (Fig. 1, Tarrosa, 2023; Cabahug, 2023; Chafer, 2022), they might be currently expanding their range. With this, its dispersal pattern can be traced as apparently directed southwards of the country from its former distribution in Luzon. We do not have the data to explain the nomadic movement of this bird, but there are some plausible reasons for this behaviour. This bird could be responding according to the ephemeral availability of resources (Mueller et al., 2011), which opens up new potential food sources as they explore new areas; challenges against competition and predation (Smith et al., 2011), or to climate change and weather conditions (Sauter et al., 2010).

There are 141 recognized species of White-eyes in the world where majority of them are found in the archipelagos of Southeast Asia (Gill, 2020). Of these, there are five White-eye species known to occur in the Philippines, three of which are also found in Negros Island (Allen, 2020) with the addition of the newly listed Lowland White-eye. With the consistent records, Negros Island now has three White-eye species across high and low elevations: Lowland White-eye in the lower elevations, Yellowish White-eye (*Zosterops nigrorum*) in mid elevations, which could potentially overlap both elevations but does not seem to extend far beyond these ranges based on prior field observations; and the Mountain White-eye (*Zosterops japonicus*) at the higher elevations.

## ACKNOWLEDGEMENTS

We would like to acknowledge Dumaguete City local government unit for supporting the initial ocular survey of the birds in the city. Special thanks to Philip Godfrey Jakosalem of the Philippines Biodiversity Conservation Foundation Inc. (PBCFI) for verifying the bird identification, and to Chris Chafer for sharing his insights about the bird.

## REFERENCES

- Allen D (2020) Birds of the Philippines: A Field Guide. Barcelona: Lynx Edicions. 299–301pp.
- Borghesio L, Laiolo P (2004) Habitat use and feeding ecology of Kulal White-eye *Zosterops kulalensis*. Bird Conservation International, 14(1): 11–24.
- Burton K. (2024) Lowland White-eye (*Zosterops meyeri*). Siit Botanical Garden, Zamboanguita, Negros Oriental, Philippines. Macaulay Library. <https://ebird.org/checklist/S193900491>. (Accessed 14 September 2024).
- Cabahug K (2023) Lowland White-eye (*Zosterops meyeri*). eBird Checklist S135532161. <https://ebird.org/checklist/S135532161>. (Accessed 14 September 2024).
- Chafer, C (2022) Lowland White-eye (*Zosterops meyeri*). Apalan, Cebu, Philippines. eBird Checklist S113103380. Macaulay Library ML461023851. <https://ebird.org>. (Accessed 23 November 2024).
- Chafer, C (2024, November 21) Lowland White-eye (*Zosterops meyeri*). Tambobo Bay, Negros Oriental, Philippines. eBird. [https://ebird.org/region/PH-NER/bird-list?hs\\_sortBy=count](https://ebird.org/region/PH-NER/bird-list?hs_sortBy=count). (Accessed 5 December 2024).

- Cornell Lab of Ornithology. (2024). *Lowland White-eye (Zosterops meyeri)*. eBird. <https://ebird.org>. (Accessed 21 November 2024).
- Cowles SA, Uy JAC (2019) Rapid, complete reproductive isolation in two closely related *Zosterops* White-eye bird species despite broadly overlapping ranges. *Evolution*, 73(8): 1647–1662.
- Craig RJ (1990) Foraging behavior and microhabitat use of two species of white-eyes (*Zosteropidae*) on Saipan, Micronesia. *The Auk*, 107(3): 500–505.
- Dutson G (2008) A new species of White-eye *Zosterops* and notes on other birds from Vanikoro, Solomon Islands. *Ibis*, 150(4): 698–706.
- Galias DCF, Cuevas VC (2018) The regenerating forest of Magbukun Aeta in Morong, Bataan, Philippines: A biological hotspot for protection and conservation. *Philippine Journal of Systematic Biology*, 12(1): 77–102.
- Gill FB, Donsker D, Rasmussen PC (2020) IOC World Bird List (v 10.2). <https://doi.org/10.14344/IOC.ML.10.2>. (Accessed 14 September 2024).
- Jakosalem PG, Paguntalan LJ, Kintanar VL, Tan KM, Quisumbing RJ, Quemado RD, Osawa T (2018) Photographic Guide to the Birds of Negros, Panay, and Cebu. Philippines Biodiversity Conservation Foundation, Inc. 335–338 pp.
- Mabugat LQA, Catalan AVJC, Te LLD, Collarin, KJL, Masiado JDR, Dogelio WG, De Oca PRR, Jakosalem PGC, & Paguntalan LMJ (2024) Bird species composition, abundance, diversity, and evenness at Panaad Park and Stadium and Provincial Capitol Park and Lagoon, Bacolod City, Negros Occidental. *Silliman Journal*, 65(1): 10–31.
- Mueller T, Olson KA, Dressler G, Leimgruber P, Fuller TK, Nicolson C, Novaro AJ, Bolgeri MJ, Wattles D, DeStefano S, Calabrese JM, Fagan WF (2011) How landscape dynamics link individual to population-level movement patterns: A multispecies comparison of ungulate relocation data. *Global Ecology and Biogeography* 20(5): 683–694. <https://doi.org/10.1111/j.1466-8238.2010.00638.x>
- Mulwa RK, Bennun LA, Ogol CK, Lens L (2007) Population status and distribution of Taita White-eye *Zosterops silvanus* in the fragmented forests of Taita Hills and Mount Kasigau, Kenya. *Bird Conservation International* 17(2): 141–150.
- Orwa C, Mutua A, Kindt R, Jamnadass R, Anthony S (2009) Agroforestry Database: a tree reference and selection guide version 4.0. <http://www.worldagroforestry.org/sites/treedbs/treedatabases.asp>. (Accessed 14 September 2024).
- Paclibar GCB, Tadosa ER (2020) Plant species diversity and assessment in Quezon Protected Landscape, Southern Luzon, Philippines. *Philippine Journal of Systematic Biology*, 14(3): 1–19.
- Sauter A, Korner-Nievergelt F, & Jenni L (2010) Evidence of climate change effects on within-winter movements of European mallards *Anas platyrhynchos*. *Ibis*, 152: 600–609.
- Smith JAM, Reitsma LR, Marra PP (2011) Multiple space-use strategies and their divergent consequences in a nonbreeding migratory bird (*Parkesia noveboracensis*). *The Auk*, 128: 53–60.
- Tarrosa VP (2023) Lowland White-eye (*Zosterops meyeri*). eBird Checklist S146874387. <https://ebird.org/checklist/S146874387>. (Accessed 14 September 2024).
- Vallejo Jr BM, Aloy AB, Ong PS (2009) The distribution, abundance and diversity of birds in Manila's last greenspaces. *Landscape and Urban Planning*, 89(3–4): 75–85.

- van Balen B (2008) Family Zosteropidae (white-eyes). In: del Hoyo, J., Elliott, A., Sargatal, J. (eds.). Handbook of the Birds of the World. Vol. 13. Penduline-Tits to Shrikes. Barcelona:Lynx Edicions. Pp. 402–485.
- Vinciguerra NT, Oliveros CH, Moyle RG, Andersen MJ (2023) Island life accelerates geographic radiation in the white-eyes (Zosteropidae). *Ibis*, 165(3): 817–828.