## Records and distribution of House Crow Corvus splendens within the eThekwini Municipality from August 2019 to August 2023

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### **Ornithology**

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#### **Abstract**

House Crows *Corvus splendens* are originally from southern Asia and are considered one of the most invasive birds in the world (Meininger et al. 1980, Nyári et al. 2006, Ryall 2010). They are invading parts of South Africa, mostly along the coastal areas in three provinces (Western Cape, Eastern Cape, and KwaZulu-Natal) (SABAP2). Here we discuss the distribution of House Crows within the eThekwini Municipality, Durban, KwaZulu-Natal from 2019–2023 records collected

by the eThekwini Municipality and South African National Biodiversity Institute (SANBI) officials. The record includes the one known roosting site within the Durban Central and most preferred areas within the city.

#### Introduction

In South Africa, House Crows *Corvus splendens* are listed as category 1a under the National Environmental Management: Biodiversity Act (NEM:BA; 2004): Alien and Invasive Species Regulations (revised in 2020), thus, requiring compulsory control and eradication. Studies have shown that the House Crow causes major issues, as they quickly outcompete indigenous species through predation, destruction of eggs and nesting sites of those species (Ryall 1992). It is regarded as a pest due to its impact on livestock and agricultural crops (Puttoo & Archer 2003). In addition, Johan et al. (2022) stated that House Crows are known to transmit pathogens and diseases that can be transmitted to humans. Fuelled by the availability of food and conducive habitat, House Crows inhabit human settlement areas especially urban, suburban and industrial areas (Hockey et al. 2005, Suliman et al. 2011). They are highly opportunistic birds and omnivorous in feeding mode which allows them to survive in diverse environments.

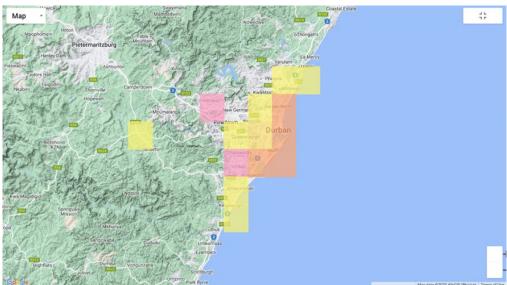
#### **Observation**

According to eThekwini officials, the surveillance and eradication of House Crow was first done in the 1990s, another between 2009 and 2013, and again between 2016 and 2018 where an estimate of few birds remained (Terry Stewart and Bheka Nxele pers. comm.). However, the follow-up program was delayed allowing the birds to resurface again multiplying exponentially in numbers. Hence, the eThekwini Municipality and SANBI officials re-initiated the surveillance and monitoring of the House Crow within the municipality.

From August 2019, different areas within eThekwini Municipality were then visited to search and monitor House Crow movement from 08h00 until 12h00 once a month by a maximum of four observers.

House Crows were sighted by driving and walking slowly along the road network, looking and listening to their calls. Once a bird was sighted, the following were recorded: number of individuals, date, time, location (GPS coordinates) and activity. Data was then captured on Microsoft Excel and later analysed on both Google Earth and ArcGIS.

Therefore, when the results from the 2019–2023 surveillance and Second Southern African Bird Atlas Project (SABAP2) records were compared, SABAP2 data showed a wider distribution of House Crows in eThekwini Municipality,ranging from Umdloti, north of Durban to Umgababa, south of Durban and inland as far as the Hillcrest/Gillitts areas. However, from the 2019–2023 surveillance results it was clear that House Crow distribution was reduced and only concentrated to the Durban coastal areas from Blue Lagoon in Durban North to Isipingo to the south of Durban. Few sightings of the species were observed in the Pinetown area while there was nothing reported in the Hillcrest/Gillitts, Umgababa and Umdloti areas as indicated in the SABAP2 data (Figure 1).



**Figure 1:** SABAP 2 House Crow distribution for KwaZulu Natal Province with majority of records within the eThekwini Municipality (SABAP2, 2023).

Most sightings of the species were recorded around the Durban Harbour, Durban South Beach, Durban North Beach, Durban Central, Berea, Umbilo and Merewent. The most preferred areas were public parks, primary school fields, taxi ranks, and around recreational areas such as UShaka Marine World, Yacht Basin and the beach. On many occasions they were observed feeding on almost anything, flying around, chasing other birds or perching on trees (Figure 2).

Observations also indicated that during the day birds were mostly observed in pairs, groups of three to 20 and on few occasions up to 30 birds. Later in the day, at around 17h00, groups of 30 to 40 birds were observed as they prepared to fly to their roost site. The largest group ever reported was at the only roosting site (West Street Cemetery, Durban Central) where an estimate of 400 to 500 birds were recorded: see <a href="here">here</a>) (Figures 3–5).



**Figure 2:** Google Earth Map showing the 2019-2023 distribution of House Crow within the eThekwini Municipality, records collected by eThekwini Municipality and SANBI officials.



**Figure 3**: House Crows at the beach (Durban South Beach, eThekwini Municipality, Durban).



**Figure 4:** House Crows at a public park (The Workshop, Durban Central, eThekwini Municipality, Durban).

**Figure 5:** House Crows on the road next to a Public Park in Durban at North Beach

In the rural parts of eThekwini Municipality, no House Crows were observed. All the sightings were either in the urban or suburban parts of the municipality.

#### References

- Hockey PAR, Dean WRJ, Ryan PG (eds) 2005. Roberts Birds of Southern Africa, 7th ed. Trustees of John Voelcker Bird Book Fund, Cape Town.
- Johan SA, Bakar UA, Taib FSM, Khairat JE 2022. House Crows (*Corvus splendens*): the carrier of pathogenic viruses or the misunderstood bird? Journal of Applied Animal Research 50: 678–686.
- **Meininger PL, Mullie WC, Bruun B** 1980. The spread of the House Crow, *Corvus splendens*, with special reference to the occurrence in Egypt. Le Gerfaut 70: 245–250.
- NEN:BA (National Environmental Management: Biodiversity Act (10/2004)) 2014. Draft Alien and Invasive Species Lists.
- **Nyári Á, Ryall C, Peterson AT** 2006. Global invasive potential of the House Crow *Corvus splendens* based on ecological niche modelling. Journal of Avian Biology 37: 306–311.
- **Puttoo M, Archer T** 2003. Control and/or eradication of Indian Crows (*Corvus splendens*) in Mauritius. National Parks and Conservation Services.
- **Ryall C** 1992. Predation and harassment of native bird species by the Indian House Crow (*Corvus splendens*) in Mombasa, Kenya. Scopus 16: 1–8.

- **Ryall C** 2010. Further records and updates of range extension in House Crow *Corvus splendens*. Bulletin of British Ornithologists Club 130: 246–254.
- **SABAP2** 2023. Species summary: Crow, House (*Corvus splendens*). Available online at: <a href="https://sabap2.birdmap.africa/species/989">https://sabap2.birdmap.africa/species/989</a> (Accessed 6 November 2023).
- Suliman AS, Meier GG, Haverson PJ 2011. Eradication of the House Crow from Socotra Island, Yemen. In: Veitch CR, Clout MN, Towns DR (eds). Island Invasives: Eradication and Management: 361–363.

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