

# Observations of a nest of an Asian Pied Starling *Gracupica contra* at Timbi, Vadodara

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The Asian Pied Starling (*Gracupica contra*) (henceforth APS), also known as the Pied Myna, belongs to the family Sturnidae (George 1971). Carl Linnaeus, a Swedish scientist, described the species in 1758 (Ali & Ripley 1983). A recent molecular analysis suggested its placement in a separate genus, leading to the reinstatement of the older genus, and it is now treated as *Gracupica contra* (Lovette *et al.* 2008, Zuccon *et al.* 2008). This species was earlier treated as *Sturnus contra* (Ali & Ripley 1983, Grimmett *et al.* 1998).

## Distribution

APS is a widely distributed bird in India, mainly found at the foothills of the Indian Subcontinent, up to around 700 mts above msl, often seen close to human settlements and especially in areas with access to open water (Ali & Ripley 1983, Lovette *et al.* 2008). This starling is a common bird of the Gangetic Plains, extending south into Andhra Pradesh, in the west till Rajasthan and in the east towards Meghalaya and Bangladesh (Rasmussen & Anderton 2005). The western distribution of this species was said to remain mainly within India's territorial limits (Ali & Ripley 1983, Rasmussen & Anderton 2005). However, a few published reports show the species' occurrence in Pakistan (Murtaza 1997, Hanif *et al.* 2017) and up to Iraq (Abed & Mudhafar 2019), where it is considered an introduced or accidentally escaped species. The natural/original distribution range of this species extends over a wide range in central, south, and southeast Asia in the following countries: Bangladesh, Bhutan, Cambodia, China, India, Lao People's Democratic Republic, Myanmar, Nepal, Pakistan, and Thailand – it was considered as introduced to the following countries: Japan, Saudi Arabia Taiwan, China, and United Arab Emirates (BirdLife International 2009).

The westward extension of its distribution range into Rajasthan and Punjab is due to changes in irrigation and farming pattern (Sharma 2004). This species was reported further south up to Mumbai (George 1971), and Ahmednagar in Maharashtra. APS sightings have been reported from various locations of Gujarat, including Rajkot (Raol 1966), Valsad, and South Gujarat, which were thought to be of escapees (Monga & Naoroji 1983). There are reports from Vansada National Park, Navsari (Singh *et al.* 2000), and from Jamnagar and Dahod (Ganpule 2016), while a recent sighting from Vadnagar, Mehsana District, in North Gujarat is known (Choudhary & Desai 2021). The status of the species is given as rare / vagrant

in the state (Ganpule 2016, 2020). Here, we present new data on the breeding of APS based on some observations near Vadodara, Gujarat. We observed the breeding activities of this starling at the water body of Waghodia, in Vadodara District.

## Study area

Timbi is a small irrigation reservoir (22° 18' 49" to 22° 18' 53" N, 73°17' 11" to 73°17' 22" E) and is located in the outskirts, towards the east, of Vadodara. This reservoir was constructed by the ex-ruler Sayajirao Gaekwad III of the erstwhile state of Baroda in 1947 for the irrigation of 48 villages in Shripor-Timbi of Waghodia Taluka, District Vadodara. It has an earthen dam within a periphery of approximately 6 sq. km encompassed area, and the water body supports various types of vertebrate fauna.

## Methodology

We monitored a breeding pair of APS, and a nest, at Timbi Irrigation Reservoir for three weeks, from 15 June 2018 to 8 July 2018, to know the food spectrum and feeding behaviour of the species. The nest was monitored by direct observations with the help of binoculars (8x40), and some of the events were documented using digital cameras. We also ensured the safety of the nest and took all measures to minimise the disturbance to the breeding birds (Barve *et al.* 2020).

## Observations

On 15 June 2018, one of the authors was on a bird-watching trip to Timbi in the morning. On the north side of the reservoir, shallow water supports dense vegetation, along with *Typha* Reeds (*Typha* sp.). This vegetation supports many



Photo 1





Photo 2

aquatic birds. Two APS were seen perched on an electric cable (Photo 1) and flew inside a dense growth of *Typha*. The author observed that one of the APS was collecting long, dry leaf blades, flying over the water body, and disappearing on the west side of the water body towards the earthen bunds. Such behaviour was assumed to be of the bird nesting/nest building. On the next day, after careful observation, we were able to locate a nest (Photo 2) on a Neem tree (*Azadirachta indica*) (22° 18' 50.79" N, 73° 16' 41.62" E). There were few large trees at the seepages of the main canal of the reservoir. The nest was at a height of about five meters, on the top branch of a less-covered tree canopy. The nest looked globular (of round shape), made up of irregular mass consisting of straws, dry

leaves, twigs, grassroots, and a few unusual nesting materials such as plastic, cotton, and Jute fibres, and its rugs (Photo 3).

We were speculating on the basis of the nest's size and the birds' behaviours that the nest was active, with eggs probably



Photo 3



Photo 4



## Asian Pied Starling...

laid inside. During the day, one of the birds continued to stay in the nest, and the other perched outside the nest, except in the morning, when both birds were actively involved in foraging nearby. One of the birds stayed a long time in the nest, which indicated one of the parents was engaged in the incubation of eggs.

On 24 June 2018, we noticed that both the birds were active during the entire day from early morning to late evening and continued to visit the nest. We speculated that the eggs must have hatched, and constant visits to the nest by both the parents showed that they were bringing food for the newly hatched fledglings (Photo 4). For the next two weeks, both parents were actively involved in feeding the chicks, and in between, they sometimes brought nesting material and repaired the nest, and at the end of the day in the late evening, both perched outside the nest.

On 5 July 2018, we noticed beaks of the two hatchlings coming out from the nest when their parents brought food. On the next day, on 6 July, both the hatchlings came out of the nest and begged for food from the parents. On 8 July, both the hatchlings and the parents were found in the same vicinity,

and the next day, they disappeared from the area. We could recognise food items which were brought by parent birds as various types of insects, spiders, earthworms, grains, and fried *sev* & puffed-rice. Both parent birds were very fond of unnatural foods such as fried wafers, puffed-rice, and *sev-ganthiya* (Photo 5).

## Discussion

The present observation of nesting is from June and July at Timbi, Vadodara. The breeding season of the species was noted to be between March and September (Ali & Ripley 1983, Pandey 1991, Sethi & Kumar 2018, Shoma & Begum 2020) which is what was observed here. The nest is a loose mass of straw formed into a dome with an entrance on the side and placed in a large tree or sometimes on man-made structures, often close to human habitation (Bajaj 1992, Tiwari 1992). Here, we noted a similar type of nest construction on a large Neem tree, and its location was close to a wet, marshy habitat. The use of nesting materials is the same as described in earlier studies (Pandey 1991, Gupta *et al.* 2013, Sethi & Kumar 2018), except for using some unusual nesting materials such as plastic, cotton, and jute fibres. The use of such unusual



items for the nest is suggestive of innovation by this species in the selection of nesting material (Gupta *et al.* 2013).

Timbi is one of the important wetlands in the district, and 248 species of resident and migratory birds have been noted here till 30 June 2022 – see the following link for details: <https://ebird.org/hotspot/L4008340?yr=all&m=>. Timbi Wetland is under great threat due to the increase in various types of anthropogenic pressures, development of new human habitations around the water body, dumping of solid waste, fishing activities, and water pollution (Naria *et al.* 2019). There is an urgent need to conserve this reservoir.

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