

Observation of a Leucistic female
Shikra *Accipiter bandius*
at a nest near Pavagadh Hill, Gujarat



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Introduction

The Shikra *Accipiter badius* is a small-sized member of the family Acciptridae. The explanation of Etymology is *Accipiter* is genus and *badius* is Latin for 'Chestnut-colored or brown'. It is a common resident accipiter with four races *A. b. cenchroides*, *A. b. dussumieri*, *A. b. badius*, *A. b. poliopsis* are found in the Indian Subcontinent (Naoroji 2006). This species is categorized as an Indian Wildlife Schedule-I species. Protection Act of 1972, a statute with high legal standing. Naoroji (2006) states that the commonest resident hawk in India. A subspecies *A.b. dussumieri* is widely distributed throughout the subcontinent including Pakistan and Nepal, but infrequently up to 2000m in the Himalayan foothills, extends parts of southwest India (as far as is known Kerala). However, it is the 'Least Concern' bird species as per IUCN Red List criteria (BirdLife International 2023). In Gujarat, it is common and widely distributed (Ganpule et al.2022).

Shikra prefers relatively various types of habitats; open wooded, dry to moist-deciduous and degraded tropical evergreen forest biotope, hills, and cultivated plains, including villages and cities also, but rarely found in Desert but common in Semi-arid areas. (Naoroji 2006; Grimmet et al. 2011; Ramussen & Anderton 2012). It nests mostly

built on medium-large trees, such as a Peepal, Neem, Tamarind, Sal, Palm, *Pinus roxburghii*, *Dalbergia sissoo* tree, and Nilgiri (Naoroji 2006; Suryavanshi 2021). But also on parasitical shrubs *Loranthus* spp. growing on a large tree (Naoroji 2006). The Shikra usually lays three or four, but rarely five eggs (Naoroji 2006). Biddulph (1973) stated, Shikra laid seven eggs within one month.

Study Area

The study area is located roadside plantation and reserved forest near Champaner village (22°27'01.1" N, 73°34'40.7" E), Halol Tehsil, Panchmahal district, Gujarat. The nesting site is close to Pavagadh Hill. Overall, this is a dry deciduous forest area between Jambughoda Wildlife Sanctuary and the Reserved Forest of Pavagadh.

Method and material

We observed a single nest of a Leucistic Shikra, from May 2nd, 2023, to June 1st, 2023. These nests were monitored randomly for a week from sunrise to sunset with binoculars (10 x 50) with the aim of knowing the feeding behaviour of the Leucistic Shikra species. The details of the nest tree (Photo 1) are given in Table 1. We also try to monitor the species by identifying the number and types of prey brought by the pair of Shikra. The nest was also monitored through the D-slr high



Photo 1

The Shikra nested on a Nilgiri tree

Photo: Dewratsinh Mori

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telelens high zoom camera (Nikon D850, 600mm F4 lens, and Nikon P1000) at a distance of 100 meters, taking care that the breeding pair was not disturbed. During the study, we took special care that birds did not disturb the nest or leave the nest, and the necessary measurements of the nest, egg, hatchling size, and weight were not taken due to nature conservation issues.



Photo 2

Photograph of the first encounter of Leucistic Shikra female

Observation

On May 2, 2023, the first author, while birding randomly in the Champaner area, Panchmahal district, Gujarat, spotted a white bird taking flight on the main road to another side and perching there. At first impression, it was like an egret; after that, instantly, photographs of the bird were taken with the help of a Nikon P1000 and activity was observed for around 15 minutes till its disappearance (Photo 2), on better surveillance, it was identified as Shikra, having normal colour legs and beak, eye yellow-orange

and an off white colour base around the beak. Unlike normal individuals, it has white plumage with a few brown coloured marks on the side of the wings and the distal part of the tail, Although the size of an individual can recognize; hence It's a female one. From the above observations, it has been clear that the bird was a Leucistic female Shikra. Thus, the observed female Shikra was considered a partial leucistic Shikra. At the same time scanning the area and luckily found one nest on the Nilgiri, and a nest with three chicks around four weeks old (Photo 3), and all three chicks were completely normal coloured. However, we are certain that it was the same aberrant female shikra's nest. That nest was discovered around 50 meters away from the first sighting.



Photo 3

Three chicks are in the nest

During the observation period, both male and female brought food to the nest for three chicks (Photo 4 & 5). We observed a few prey items: a garden lizard, *Calotes versicolor* (Article Title image) an unidentified rodent; a Red-vented Bulbul *Pycnonotus cafer* and an unidentified skink. However, we noted twenty-eight bird species belonging to twenty-four families surrounding the one-kilometer radius of the nest area, and a few were visit the nest tree (Table 2).

Table 1 - The details of the nest tree

Parameter	Measurement
Species of tree	Nilgiri Tree (<i>Eucalyptus sp.</i>)
Height of tree	24 meters
Height of nest	12.5 meters
The girth of tree trunk	1.5 meters
Nest orientation in relation to nest-tree trunk	South
Height of nearest tall trees	20 meters
Distance of nest from transportation road	25 meters

Table 2 - The list of the bird species associated with one kilometre of the study area

No	The species name of Birds
	Pycnonotidae
1	Red-vented Bulbul (<i>Pycnonotus cafer</i>)
	Passeridae
2	Yellow-throated Sparrow (<i>Gymnoris xanthocollis</i>)*
	Vangidae
3	Common Wood shrike (<i>Tephrodornis pondicerianus</i>)*
	Corvidae
4	Jungle Crow (<i>Corvus culminates</i>)
5	Rufous Treepie (<i>Dendrocitta vagabunda</i>)
	Nectariniidae
6	Purple Sunbird (<i>Cinnyris asiaticus</i>)*
	Ardeidae
7	Cattle Egret (<i>Bubulcus ibis</i>)
	Paridae
8	Cinereous Tit (<i>Parus cinereus</i>)
	Phasianidae
9	Indian Peafowl (<i>Pavo cristatus</i>)
	Columbidae
10	Spotted Dove (<i>Streptopelia chinensis</i>)
11	Yellow-legged Green Pigeon (<i>Treron phoenicopterus</i>)
	Psittaculidae
12	Alexandrine Parakeet (<i>Psittacula eupatria</i>)
	Cuculidae

No	The species name of Birds
13	Common Hawk Cuckoo (<i>Hierococcyx varius</i>)
14	Greater coucal (<i>Centropus sinensis</i>)*
15	Asian koel (<i>Eudynamys scolopaceus</i>)
	Apodidae
16	Asian Palm Swift (<i>Cypsiurus balasiensis</i>)
	Coraciidae
17	Indian Roller (<i>Coracias bengalensis</i>)
	Alcedinidae
18	White-throated Kingfisher (<i>Halcyon smyrnensis</i>)
	Meropidae
19	Asian Green Bee-eater (<i>Merops orientalis</i>)
	Megalaimidae
20	Coppersmith Barbet (<i>Psilopogon haemacephalus</i>)
	Picidae
21	Black-rumped Flameback (<i>Dinopium bengalense</i>)
	Artamidae
22	Ashy Woodswallow (<i>Artamus fuscus</i>)
	Aegithinidae
23	Common Iora (<i>Aegithina tiphia</i>)
	Campephagidae
24	Small Minivet (<i>Pericrocotus cinnamomeus</i>)

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No	The species name of Birds
	Dicruridae
25	Black Drongo (<i>Dicrurus macrocercus</i>)
	Leiothrichidae
26	Jungle Babbler (<i>Turdoides striata</i>)*
	Dicaeidae

No	The species name of Birds
27	Pale-billed Flowerpecker (<i>Dicaeum erythrorhynchos</i>)
	Bucerotidae
28	Indian Gray Hornbill (<i>Ocyceros birostris</i>)

*Bird visits nesting tree



Photo: Dewraisingh Mori

Photo 4

Three chicks are being fed at the nest by a male Shikra



Photo: Mital Patel

Photo 5

Three chicks are being fed at the nest by a female Shikra

Later, the first author visited the nest location on June 1, 2023. He was shocked, the Shikras nest was empty, and the mother had brought prey to the nest for the chicks. The author also spent about two hours watching the female fly about the nest and searching for the chicks. She couldn't find it. The author watched from a safe distance as the female took the prey to the empty nest; the nest made no response. It's possible that the little chicks perished in the storm. We were unable to uncover any solid proof to refute that occurrence.

Discussion

Leucism is an uncommon occurrence that has been noted in numerous Indian avian species. The orders include (Passeriformes): a photographic record of leucistic Jungle Babbler *Argya striata* from Nagpur (Sani & Kasambe 2007), Leucism in Brahminy Starling *Sturnia pagodarum* from Ahmednagar district, Maharashtra (Phalke 2020), House Sparrow *Passer domesticus* from West Bengal (Bera 2021), first glimpses of Jungle Myna *Acridotheres fuscus* from Orissa (Samal 2021), leucistic Eurasian Magpie *Pica pica* in Ladakh (Khan 2023). (Alcedinidae): A leucistic Common Kingfisher *Alcedo atthis* in Udaipur (Rathore & Saxena 2022). (Charadriiformes): Leucism has been observed in Wood Sandpiper *Tringa glareola* at Akola, Maharashtra (Telkar & Kasambe 2023). (Gruiformes): India's second record leucistic Common Crane *Grus grus* sighted at Kachchh, Gujarat (Joshi 2020), as well as many other species.

There were a few published reports about aberrant color in raptors from India. The albino crested Hawk Eagle was discovered in Rajasthan's Sitamata Wildlife Sanctuary (Parashar & Sharma 2010). Although an unreported record of pure albino from Northeast India and a leucistic record from Surendranagar, Gujarat (Pers., comm., Nirav Bhatt). The leucistic shikra has been noticed and photographed at a few locations in India, including the Central University of Rajasthan (Verma 2022) and the Pench National Park in Madhya Pradesh (Thomare 2014 and Dubey 2015).

However, we are still looking for the answers of a few questions, which unable to explain. How the leucistic Shikra hunt and what success rates could be? Also, what could be the lifespan of the bird, and how it interacts with other birds of prey? These could be found with the help of further intensive research on the subject only.

Acknowledgment

We are grateful to Mukund Baria for accompanying us during the fieldwork. We thank the Gujarat Forest Department and FD staff of Jambughoda Wildlife Sanctuary. Finally, we express gratitude to Dr Raju Vyas for improving the manuscript draft. We also thank Nirav Bhatt for sharing valuable information.

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