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Man-wildlife conflict

Prof. Dr. Satish Pande*

Indian Golden Oriole *Oriolus kundoo* is considered as a distinct species from Golden Oriole *Oriolus oriolus* based on differences in plumage, morphology, calls and separate distributions. Indian Golden Oriole has not been studied in details and the breeding biology of this beautiful bird is not described. It inhabits India, Afghanista, Kyrgyzstan, Kazakhstan, Turkmenistan, Tajikistan, Nepal and Sri Lanka. In this issue of *Ela Journal of Forestry and Wildlife*, the breeding biology of this interesting species is reported for the first time. More studies and long term observations on this bird are certainly warranted to better understand several unknown aspects of this species, in view of their poor breeding outcome, as described in this issue.

The observations on the feeding behavior of the Indian Grey Hornbill using a camera placed in front of the nest cavity, is another interesting paper in this issue. Such detailed studies on tree hollow nesting large birds like hornbills are important because they help us understand the basic requirements of these birds which are essential for their effective conservation. The adaptability of the Indian Grey Hornbill, as evident by opportunistic feeding on human made items, underscores this point.

Importantly, we also have an interesting note, with some rare photographs, on the breeding behavior of the South Polar Skua based on direct observations made from Maitri Station during the Indian Expedition to Antarctica. Threats to chicks of this large carnivorous bird are also mentioned indicating a tough battle that these large birds have to wage in hostile circumstances of Antarctica. The baseline observations suggest that there is a great scope to conduct in depth ornithological studies by Indian scientists in Antarctica, an aspect that is hitherto neglected.

Another paper addresses the human-wildlife conflict issues relating the leopard. A methodology successfully adopted by the Forest Department staff from Thane, to avoid injury to man and leopard is explained and it is likely to benefit young forest staff. We hope that this note shall inspire several other foresters and officers to contribute their experiences in *Ela Journal of Forestry and Wildlife* for the benefit of conservation. Such experiences assist in addressing unforeseen circumstances, and prevent repetition of earlier mistakes. The incidences of man-wildlife conflict are rising every day and these are likely to escalate further in view of human modifications on natural habitats. Newer wildlife species are now in conflict with humans on a wider geographical scale. The issue of man-wildlife conflict is complex and warrants a dedicated issue of our journal, that we are planning in the near future.

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Exploring avenues in wildlife research

Jeet Singh*

The present issue of the Ela Journal of Forestry and Wildlife has come up with very interesting revelations about the breeding behaviour of Indian Golden Oriole in mosaic deciduous, agricultural, semiarid habitats of Purandar taluka for the first time. We also have a paper based on video camera monitoring on the dietary habits of Indian Grey Hornbill in Madhya Pradesh. It is a matter of pride for us that our dedicated bird lovers are trying to search each and every biological mystery in order to save our precious fauna. Perhaps this is the only way through which we can understand the crucial habitat needs of our valuable bird life and save them from the impending threats.

Another note includes observations on the South Polar Skua from Antarctica. Truly speaking, it is not easy to decipher this enigmatic mystery of bird life, particularly in remote area like Antarctica, the vital and fragile region that we have on our only planet earth. I sincerely hope that these efforts will definitely pave the way for achieving conservation of our habitats through scientific scrutiny in the near future.

Rescuing leopards from human habitations has always been challenging. Every time, the forest department learns new lessons from rescue efforts regarding the precautions in handling leopards, identify the causes for its entry in populated areas and finding long term solutions. In fact, there is a lot more to do in the arena of avoiding human wildlife conflict. In addition to undertaking habitat improvement works, what is equally important is sensitization of local communities to understand the art of co-existence with our nature and its integral flora and fauna. Forest department must as well equip itself with all the modern tools to handle any emergency.

I am sure that our wild life experts will continue this journey of exploring new avenues to make sure that we first understand and then ultimately achieve that nothing is lost from our rich natural heritage.

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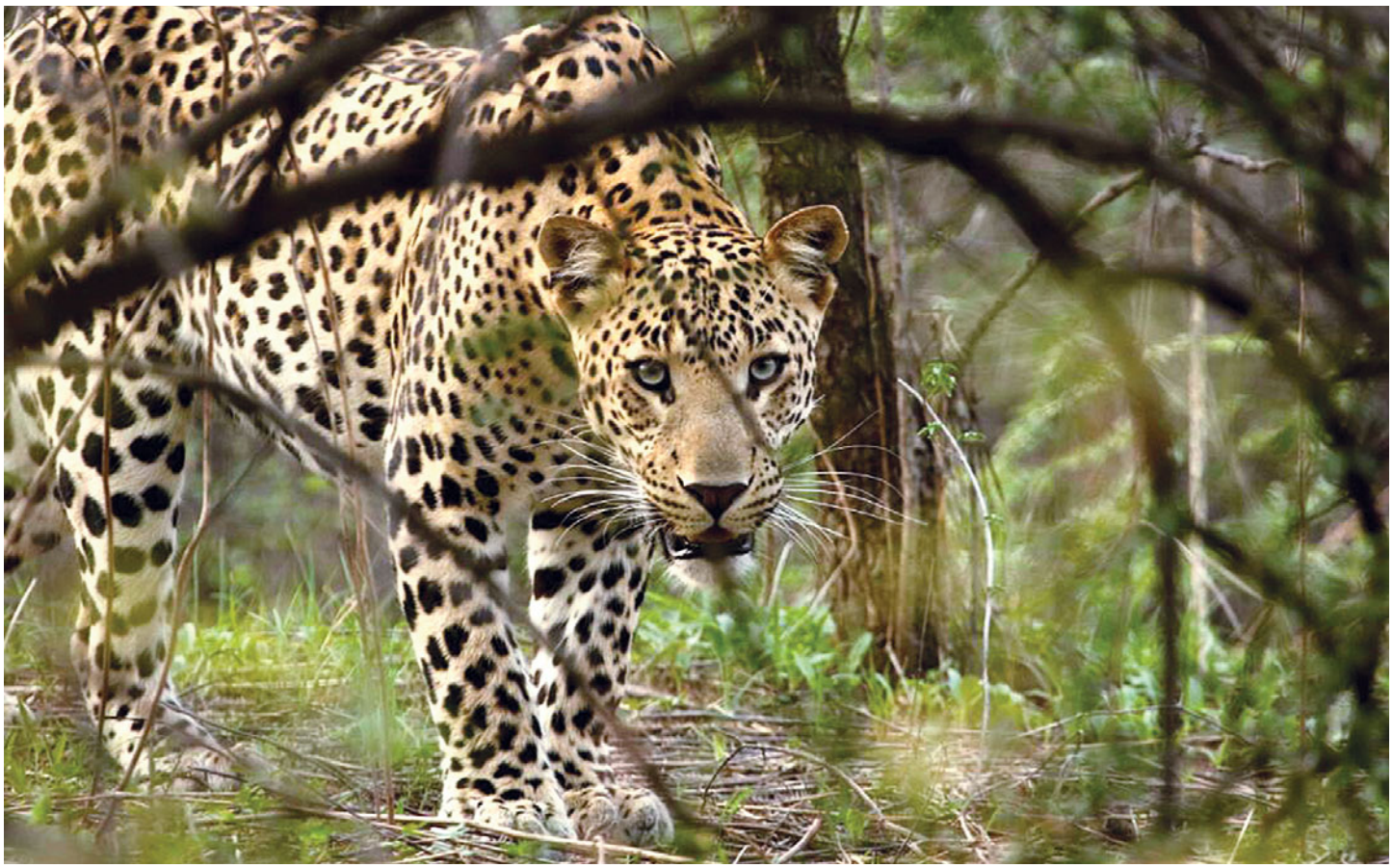

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Breeding biology and feeding habits of Indian Golden Oriole *Oriolus kundoo* in Purandar taluka, Pune district, Maharashtra, India

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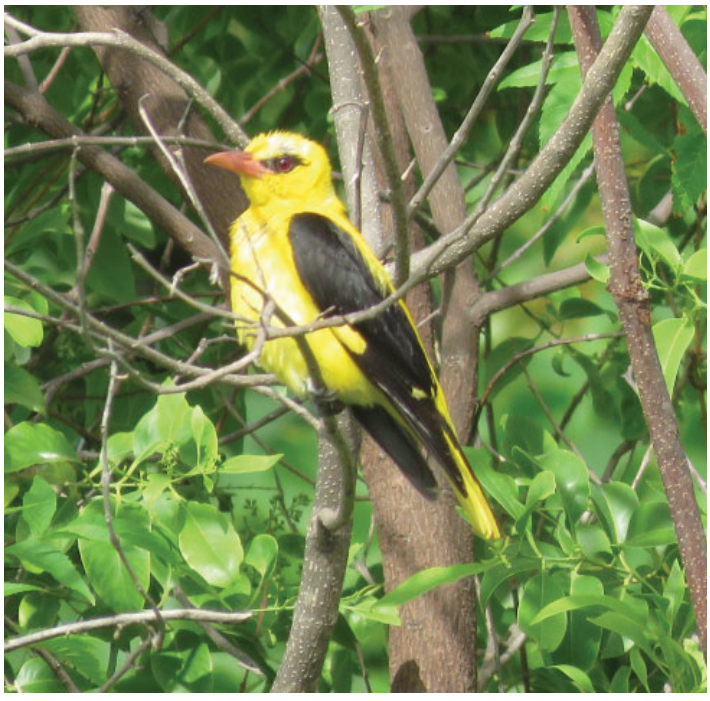

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Abstract

The Indian Golden Oriole *Oriolus kundoo* was observed breeding for the first time in Purandar tehsil, Pune district, 2015 to 2017. We report the breeding biology of Indian Golden Oriole for the first time for this region. 12 nests were recorded on 6 tree species in 3 years. Clutch size was 2-3 eggs, incubation period was 14 to 15 days, and the chicks fledged after 17 to 18 days from the laying of the first egg. The hatching success was 56.5%, fledging success 54.2%, breeding success 33.3%, and nest failure was 58.3%. Total survival probability was 29.7% i.e., that a nest would fledge at least one young and 9.8% chance that at least one egg would hatch per nest. The daily survival rate for nests was 0.96 and for eggs was 0.92.

Keywords

Indian Golden Oriole, *Oriolus kundoo*, Breeding biology, Daily survival probability.

Introduction

The Indian Golden Oriole (*Oriolus kundoo*) is a resident bird of the Indian subcontinent, Tajikistan, Turkmenistan, Uzbekistan, Kyrgyzstan and Kazakhstan (del Hoyo et al 2016) and it is also recorded from Maharashtra (Pande et al 2011) and features as Least Concern in the Red List Category (IUCN 3.1). (BirdLife International 2016). Adult male and female orioles are dimorphic. Loud fluty and often harsh calls reveal their presence in the open woodland and agricultural cropland habitat where they occur. (Grimmett, Inskipp and Inskipp, 2013). The Indian Golden Oriole was recently recorded breeding in Purandar taluka of Pune district, Maharashtra for the first time in 2015. In this paper we present the breeding biology and feeding habits of Indian Golden Oriole for the first time for this region.

METHODS

All observations were made during the breeding season (May-July), 2015 till 2017. Observations were made at 12 different nests, at least twice from the onset of courtship display, for each nest. Calling and displays of the oriole were observed to locate occupied territories and subsequently nests were identified. Habitat in a circle of 1 km with the nest at the centre comprised of agriculture cropland (cultivated and fallow land) amidst sparsely wooded areas near Jejuri town (18.28°N & 74.17°E), in Tehsil Purandar, Pune district, Maharashtra, India. Biweekly visits were made at all the sites after nests were found and observations were made about the breeding behaviour. Feeding behaviour of adults when the chicks were in the nest and during the branching period was also observed. We noted the dates for egg laying, hatching and fledging. The number of eggs laid, number of eggs hatched, and number of chicks fledged. In addition, the nesting trees, nest height from the ground and cause of predation were also recorded. We calculated the daily survival probability

Based on the data collected for 12 nests, the daily survival probability and total survival probability of eggs and hatchlings of Indian Golden Oriole were calculated using simplified version of Mayfield Method (www.prbo.org/cms/docs/terre). A nest was considered to be active when at least one egg was laid. Exposure days were counted from the time when either the egg laying date was recorded or when the nest was first found with hatchling (find date) till the last active check. Subsequent visits were not counted for exposure time. Calculations for active and failed nests were done separately. Daily survival is a probability that the nest will survive from one day to the next. Total survival probability is the survival probability for the entire nesting period or cycle. To calculate a survival probability for the entire nesting period or cycle (laying, incubation, nestling and fledging) raise the daily probability to a power equal to the number of days in the nest period/cycle:

(S^) = (exposure days – failed nests) ÷ exposure days.

We also calculated the -

Total Survival Probability = (Daily Survival Probability) $^{\text{Total Nesting Period}}$

The assumptions made for the Mayfield method are: a) the average nesting period of Indian Golden Oriole is considered, b) In case of unknown hatching dates,

an average incubation period of golden oriole was considered and the dates were accordingly adjusted, and c) this method was used to calculate survival probability of eggs and the entire nest.

All observations were made from a safe distance strictly in accordance with the Wildlife Protection Act (1972).

OBSERVATIONS

We present the first record of the breeding of the Indian Golden Oriole in Purandar tehsil. Authors have previously recorded its breeding only in Kokan and Western Ghats mountains in Maharashtra. The breeding season in the study area was from 10th April to 26th August. Total 12 nests were found during the study period (2015-2017) (Table 2). The nest was a hammock made from twigs and grass and lined with leaves and was built on the peripheral branch of a tree. Nests were found on 8 tree species including Neem *Azadirachta indica* (3 nests), Tamarind *Tamarindus indica* (2 nests), Pongamia *Millettia pinnata* (2 nests), Mango *Mangifera indica* (1 nest), *Acacia* arabica (1 nest), Wood Apple *Hydnocarpus wightiana* (1 nest), Behda *Terminalia bellirica* (1 nest), *and* Jamun *Syzygium cumini* (1 nest). The average height of the nest from the ground was 3.01 meters (r=1.82 - 4.87m; Table 1). Nest dimensions were: Height 6 cm, Inner Depth 3 cm, Outer Diameter 11cm, Inner Diameter 7.5cm and Inner Perimeter 22 cm. Year-round observations were made in the study area and orioles were seen throughout the year (Table 3).

One clutch was laid per year. If the nest was predated, second clutch was not laid. Clutch size was 2-3 eggs. Incubation period was 14 to 15 days, and the chicks fledged after 17 to 18 days from the laying of

the first egg. 24 eggs were laid in 12 nests. 13 chicks hatched from 24 eggs laid. (56.52% hatching success). Seven out of 13 chicks fledged (54.2% fledging success). The breeding success was 33.33% (4 out of 12 nests fledged at least one young). Nest failures were caused by observed events by predators in 7 out of 12 nests (58.33%). For total survival probability we found 29.71% chance that a nest would fledge at least one young but only 9.82% chance that at least one egg would hatch per nest. The daily survival rate for nests was 0.96 and for eggs was 0.92.

Food items brought by the parents to the nest consisted of grub, green caterpillar, grasshopper, beetle, praying mantis and moth; and fruits like guava, and custard apple. In the 1st week after hatching both male and female parents feed the chicks and in the 2nd week mainly female feed the chicks, and during post fledging dependence period both the parents feed the chicks.

Discussion:

For the British Fenland populations of *Oriolus oriolus*, the nest building period was five to nine days and the hatching duration was 48 to 72 hrs (n=9 nests) (Milwright, 1998). The average clutch size was 3.6 to 4 (Cramp & Perrins, 1993; Congreve, 1934; Glutz 1962 and Hudec 1983) which was higher than our clutch size of 2 to 3 eggs. The incubation period was 16 to 17 days (Milwright, 1998) which was longer tha n in our study (14 to 16 days); the mean fledging success was 1.65 per nest (Milwright, 1998) and 2.5 per nest for Russian population (n=14 nests) of *Oriolus oriolus* (Malíchevski, 1959), as compared to 0.6 young per nest in our study. We agree with Milwright (1998), that for the maintenance of a stable population of *Oriolus kundoo* in our study area, where we found similar low productivity as in Fenland, the requirements are low post-fledging mortality, high mean adult survival rate and an adequate compensatory adult immigration from other regions.

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Table 1. Nest locality, nest tree species and nest height of the Indian Golden Oriole in the study area.

Sr. No.	Nesting locality	Tree	Nest Height (meters)
1.	Mandki 1	Jamun	2.43
2.	Kolvihire 1	Neem	3.65
3.	Kolvihire 2 Well	Neem	2.43
4.	Kolvihire 3 Tamrind	Tamarind	4.87
5.	Kolvihire 4 Ghatewadi Road	Neem	3.35
6.	Kolvihire 5 Karanj	Pongamia	2.13
7.	Kolvihire 6 Karanj (Ringed)	Pongamia	2.13
8.	Pandeshwar	Tamarind	3.04
9.	Pani Panchayat	Bahera	1.82
10.	Borawake Wasti	Kawath	4.87
11.	Kamathwadi	Acacia	3.04
12.	Mandki 2	Mango	2.43

Table 2. Locality-wise and year-wise breeding data of the Indian Golden Oriole in Purandar tehsil during the study period. (No.-number)

Sr. No.	Site	No. of eggs	No. hatched	No. Fledged	Year
1.	Mandki 1	2	0	0	2015
2.	Mandki 2	2	0	0	2016
3.	Kolvihire 1	2	2	0	2016
4.	Kolvihire 2	3	2	0	2016
5.	Kolvihire 3	2	2	0	2016
6.	Kolvihire 4	2	0	0	2016
7.	Kamathwadi	2	0	0	2016
8.	Pandeshwar	2	2	2	2016
9.	Kolvihire 5	1	0	0	2017
10.	Kolvihire 6	2	2	2	2017
11.	Khalad	2	1	1	2017
12.	Saswad	2	2	2	2017
Total		**24**	**13**	**7**	

Table 3. Year-round observations of Indian Golden Oriole (*Oriolus kundoo*) in Purandar tehsil.

Date	Sightings	Place
March 2016	Yes	Kolvihire
April 2016	Yes	Kolvihire
May 2016	Yes	Kolvihire
June 2016	Yes	Mandki, Kolvihire
July 2016	Yes	Kolvihire
August 2016	Yes	Kolvihire
September 2016	Yes	Kolvihire, Morgaon
October 2016	Yes	Supe, Morgaon
November 2016	Yes	Supe, Morgaon
December 2016	Yes	Supe
January 2017	Yes	Kolvihire
February 2017	Yes	Kolvihire
March 2017	Yes	Kolvihire
April 201	Yes	Kolvihire

Fig. 1: Breeding outcome of Indian Golden Oriole in study area:

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Observations on the diet of the Indian Grey Hornbill *Ocyceros birostris* during its breeding period using video camera at Indore, Madhya Pradesh

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Introduction:

The study of the diet of the Indian Grey Hornbill (IGH) *Ocyceros birostris* during its breeding period was undertaken in Indore, Madhya Pradesh to record its diet in urban environment. The objective of the study was to record the food delivered to the nest inmates during the complete breeding cycle of IGH using CCTV Camera installed outside the nest cavity.

Materials and Methods

This study was conducted in the bio-diversity nursery of the forest department situated in Navratanbagh, Indore in the year 2013 to cover the entire breeding cycle (20th March to 18th June, 90 days). The Residency area is one of the greenest area of the city, which still holds a large number of old trees like *Ficus bengalensis, F. religiosa, F glomerata, and Azardirachta indica,* which attract the hornbills for their ripening fruits. These trees also have natural cavities suitable for hornbill nests.

A Gulmohar tree *Delonix regia* on which the hornbill had nested the previous year was identified to fit the camera before the female entered the cavity. A high resolution web camera with zoom-in and zoom-out features was installed on a pole in front of the hornbill's nest. The camera was mounted at a distance of 5 metres from the cavity nest opening. The camera was covered with a protective shield. A DVR (Digital video recorder) was set up in the nearby forest officer's residence and was connected to a personal computer. Live feeding was monitored twice a day by one observer on the computer and depending on the type of footage required the camera lens was zoomed in or out. The recording was in dav format which was later converted into mp4 format for analysis. In addition to the CCTV Camera recording, DSLR Camera with zoom lens and binoculars were also used to record activity. The data starting from 5:30 AM till 7:30 PM was later segregated since there was no feeding activity in night time. Data of 31 days (total 434 hrs) with equal intervals which

comprised of 14 hours each from morning 5:30am to evening 7:30 pm was analysed for recording diet items.

Observations:

The actual breeding cycle lasted for 83 days. Camera footage observations of 434 hours at the nest hole revealed that the male hornbill visited the nest 631 times for feeding, averaging 20 times in single day (comprising of 14 hrs) (Table 1).

Table 1: Daily visits of male and female Indian Grey Hornbill for delivery of food to the nestlings.

Daily visits for delivery	Average	Standard deviation	Total visits
Male	20.35	5.35	631
Female	14.375	8.19	115

A total of 3814 food items were delivered at the nest in all the visits. While the male brought majority of food (3561 food items; avg. 5.6 items per visit) the female brought (253 food items; avg. 2.2 items per visit).

When the female was inside the cavity the male visited the nest 470 times in 23 days (322 hours) of observation and supplied 2856 food items (avg. 6 items per visit). After the female's exit from the nest the male visited 161 times and female 115 times in 8 days (112 hours) of observation and both delivered 958 items to the chicks with male feeding 4.4 items per visit and female provided 2.2 food items per visit.

A total of 2254 plant material was delivered to the nestlings (59.10% of the total diet). The animal matter was supplied 1357 times (35.58% of the total diet) and rest 5.32% was manmade items (chapattis, biscuits, flaked rice and other leftovers). Plant items averaged 72 ±24, animal items averaged 43 ±19 and man-made items averaged 14 ±11 per day both by male and female in the entire breeding cycle (Table 2).

Before hearing the begging call of the chicks, delivery of plant material was 77.59% and the animal matter was 22.41%, whereas after hearing the begging call of the chicks, the plant material supplied was 46.09%, the animal matter 44.84% and manmade items constituted 9.07% of the total diet. There was an increase of 22.43% in animal matter and decrease of -31.50% in plant matter after hearing the begging calls (Table 3).

The hornbills feeding the chicks with chapattis, biscuits and other human leftovers constituted low diet percentage of this pair.

Conclusion:

With the availability of CCTV camera based systems and camera traps the study of bird behaviour has become

Table 2: Different food items delivered to the nest in the entire breeding season delivered to the nestlings per day.

Food Items	Average per day	Standard deviation	Total Quantity	Relative %
Plant matter	72.7	24.57	2254	59.1
Animal matter	43.77	19.31	1357	35.58
Man-made items	14.5	11.71	203	5.32

Table 3: Difference in diet supplied before and after the begging call of nestlings.

Food Items	Quantity		% of items	
	Before begging call	After begging call	Before begging call	After begging call
Plant matter	1222	1032	77.59%	46.09%
Animal matter	353	1004	22.41%	44.84%
Man-made items	0	203	0.00%	9.07%
Total	1575	2239	100.00%	100.00%

relatively easy. However, it takes a lot of time to see the entire footage. Our observations reveal a noticeable decrease in daily visits of male for delivering food to the nest after the emergence of female from the nest. Behaviour of IGH during the breeding cycle shows that before the begging calls of the nestlings, plant matter was supplied, and after the begging call of the nestlings from within the nest cavity, there was notable increase in the delivery of animal matter with decrease in plant matter, with a negative difference of -31.50% in plant matter and a positive difference 22.43% in animal matter. This behaviour shows the intelligence of the IGH while collecting the food, which it had to collect in the reverse order animal matter first and plant matter last) from the nearby areas. The hornbills feeding the chicks with chapattis, biscuits , and other human leftovers may be seen as their adaptation when such items were readily available. Use of chapattis and biscuits as a part of hornbill diet was not documented earlier.

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Note on the breeding of South Polar Skuas *Catharacta maccormicki* at Maitri Station, Antarctica

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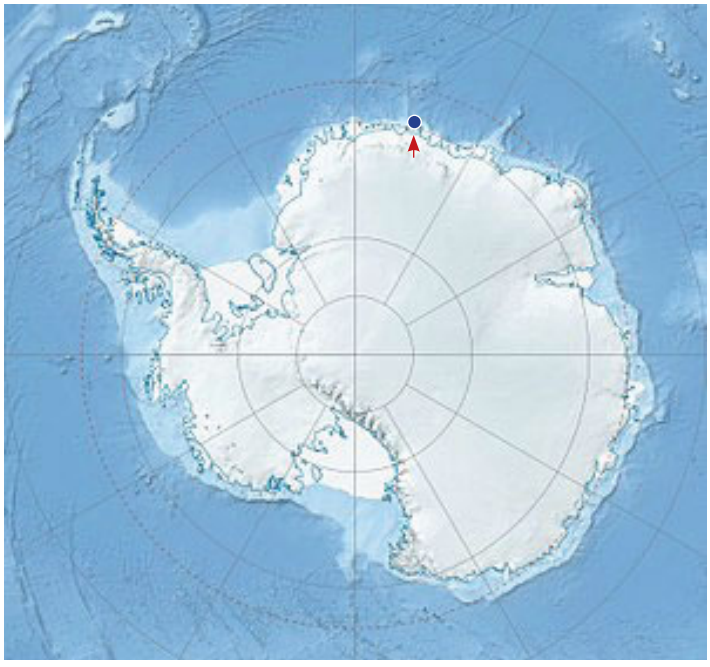

A map of Antarctica with Maitri Station, India

Abstract:

5 breeding pairs of South Polar Skuas *Catharacta maccormicki* were observed near Maitri Station, Antarctica in the years 2016- 2017 during the 36th Indian Scientific Expedition to Antarctica. The first Skua arrived with the onset of melting of snow on 19th October 2016 and the last Skua left the Maitri Station region with the onset of freezing of water on 30th March 2017. Ten Skuas arrived with one pair inhabiting each of the five lakes around Maitri Station. A total of 16 South Polar Skuas were seen to depart at the end of the breeding season. On one occasion, predation of Skua chick was attempted by Black Storm Petrel *Oceanodroma melania*, which resulted in the death of one parent Skua and the predator.

Observations:

As a part of the Antarctic Program, I visited Antarctica during the 36th Indian Scientific Expedition to Antarctica during 2016-2017. I had an opportunity to observe the South Polar Skuas or Antarctic Skuas *Catharacta maccormicki* near Maitri Station (70°46′00″S 11°43′53″E; 130 m ASL), which is India's second permanent station in Antarctica built in 1984. Maitri Station is situated on the rocky mountainous region called Schirmacher Oasis, in the area of Queen Maud Land, Antarctica. Maitri is 5 km away from the Russian Novolazarevskaya Station. An open area of about 400 m x 800 m is present around Maitri Station.

Three lakes are situated to the west of Maitri Station, the first is 500 m to the west, the second lake is 300 m northwest of the second lake and the third lake is 1 km west of the second lake. The fourth lake is located 500 m to the east of Maitri Station and the fifth lake 500 m to the east of the 4th lake. Another lake Priyadarshini, located in front of Maitri, provisions fresh drinking water to the scientists residing at Maitri.

The first South Polar Skua arrived at the Maitri Station on 19th October 2016, when melting of ice had started. The skuas often approached quite close to us and were reluctant to fly unless disturbed. Each lake was seen to have a pair of South Polar Skuas. On 29th December 2016, the first chicks of South Polar Skuas were observed for the first time. The chicks walked around the nest which was made of tiny pebbles

Adult South Polar Skua (in flight, above) and juveniles (below) near Maitri Station, Antarctica

arranged on the ground amidst rocks. The chicks were always at some distance from one another. Maximum two chicks were observed in one locality. The chicks sheltered under crevices of rocks and had a cryptic plumage. On 24th January 2017, one Black Storm Petrel *Oceanodroma melania* attacked a chick of the South Polar Skua. The ensuing encounter between parents and the predator resulted in the death of one parent Skua and the Black Storm Petrel.

The food of skuas constituted mainly of fish from the eelpout group (*Zoarcidae* sp.), snow petrels, storm petrels and baby penguins 60 % of the fishes found here are endemic to the Antarctic region. The South Polar Skuas constitute the largest population of birds of the Antarctic region.

The normal wind velocity is of 20 knot, which can become as much as 45 to 50 Knots or higher during the blizzard. When wind velocity started increasing to about 25 knots in the first week of February, the Skua chicks started taking their first flight under the guidance of their parents. Flying was observed for one month. With the onset of freezing of ice, the parent and juvenile Antarctic Skuas started leaving Maitri Station from 20th March 2017. On 30th March 2017 the last pair of Skuas left. The largest number of Skuas observed at one time was 10 in one flock and 6 in another flock. The total number of South Polar Skuas, including adults and juveniles, just prior to leaving Maitri Station was 16. On 6th May 2017, a flock of Black Storm Petrels was sighted at Maitri. I did not observe breeding of Black Storm Petrels.

On 8th October 2017, one Snow Petrel *Pagodroma nivea* was first seen at Maitri Station. This elegant bird has pure white plumage. After a gap of 6 months, on 8th October 2017, the first South Polar Skua was seen again on 10th October 2017. This was probably a sentinel Skua, because after one week a flock of South Polar Skuas arrived with Snow Petrels. Further observations on breeding of South Polar Skuas in the present season were not possible because we had to leave for our homeland.

Acknowledgement:

I sincerely thank PMRD (IMD, New Delhi) and NCAOR , Goa for giving me an opportunity to participate in the 33rd and 36th Indian Scientific Expedition to Antarctica. I thank my team members for their kind co-operation in assisting me watch the movements of birds. Lastly and importantly I sincerely thank Dr. Satish Pande for giving me a new insight and for his guidance and encouragement.

Record of Swinhoe's Snipe *Gallinago megala* from Solapur, Maharashtra.

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2, 3Nature Conservation Circle, Solapur.

Citation: **Vanjari, Raghvendra**, **Chedda Bharat and Vanjari Rahul** (2017). Record of Swinhoe's Snipe *Gallinago megala* from Solapur, Maharashtra. *Ela Journal of Forestry and Wildlife* 6(3): 418-419

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Swinhoe's Snipe feeding on floating vegetation

Snipe *Gallinago* sp. was one of the interesting game birds during the late 19th and early 20th century in British India. Although Wildlife Protection Act 1972 banned it and implemented its conservation, the members of family Scolopacidae continued to be shot during game. Present short communication deals with an updated record of Swinhoe's Snipe *Gallinago megala* (Swinhoe, 1861) from Solapur, Maharashtra. Known distribution of the Swinhoe's Snipe is from the Indian subcontinent up to the North East states (Ali and Ripley 1999, Grimmett *et. al.*, 2010); Gaye 1891, Stoney 1912, Brown 1927, Whistler 1939, Beckett 1943, Adams 1948a).

Swinhoe's snipe is native of Russia and Mongolia, and migrates southwards from India up to Australia in winter. Accordingly, in December 2015 we sighted a population of this bird while they were foraging on the floating carpet of *Eichhornia crasipius*. We identified the snipe from its beak and body ratio. Size difference between tail and end of primary coverts are typical for this species along with white un-streaked under tail coverts confirming the species of *G. megala.* Authors visited BNHS collection museum of birds to confirm the morphological details. (Specimen numbers 14951, 14938, 22840).

Solapur lies in semi-arid subregion of subtropical thorny forests in Deccan peninsula of India with an elevatio of 455m above ASL. There are many wetlands in this district among them; Sambhaji Lake (17°38'42.3"N 75°54'08.5"E) is unique. During observation period the lake was covered with *Eichhornia crasipius*, while edges were compounded with *Typha lotifolia*, *Acacia arabica*, *Calotropus* sp., *Prosopis* sp. in addition to reed beds. Approximately over 11331.20sq.mt. area was occupied by floating flora where the snipes were recorded. Weekly observations were conducted from 12 December 2015 to 31 January 2016.

Mean count of Swinhoe's Snipe was 63, 47 and 13 individuals per consecutive fifteen days. Reporting of the occurrence with its population count is important

Museum specimens of Swinhoe's Snipe

while recording its distribution and wintering range in the Deccan plateau. As per available literature it was previously recorded from Maharashtra (Abdulali 1970a & 1970b, Mahabal *et. al.*, 2011, Pande *et. al.*, 2011, Prasad 2003) but various checklists do not report this species from Solapur (Davidson and Wenden 1878, Butler 1881, Mahabal 1989, Gaikwad *et. al.*, 1997, Vanjari *et. al.*, 2014). The population trend of Swinhoe's snipe is still unknown (Birdlife international 2015). Results of Asian Waterbird Census has reported the population around hundred birds and fluctuating in years (Li *et. al.*, 2009; Aitken 1904, Abdulali 1935, Adams 1939, Adams 1948b).

Acknowledgment:

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The rescue of Leopard *Panthera pardus* from Indian Air Force Station, Kolshet, Thane

Sharan Deshpande* and Shirish Rajwade#,
(*Range Forest Officer, Research, Shahapur; #Asst. Geneticist, Wada. Maharashtra Forest Department)

Citation: **Sharan, Deshpande and Rajwade Shirish,** The rescue of Leopard *Panthera pardus* from Indian Air Force Station, Kolshet, Thane *Ela Journal of Forestry and Wildlife* 6(3): 421-423

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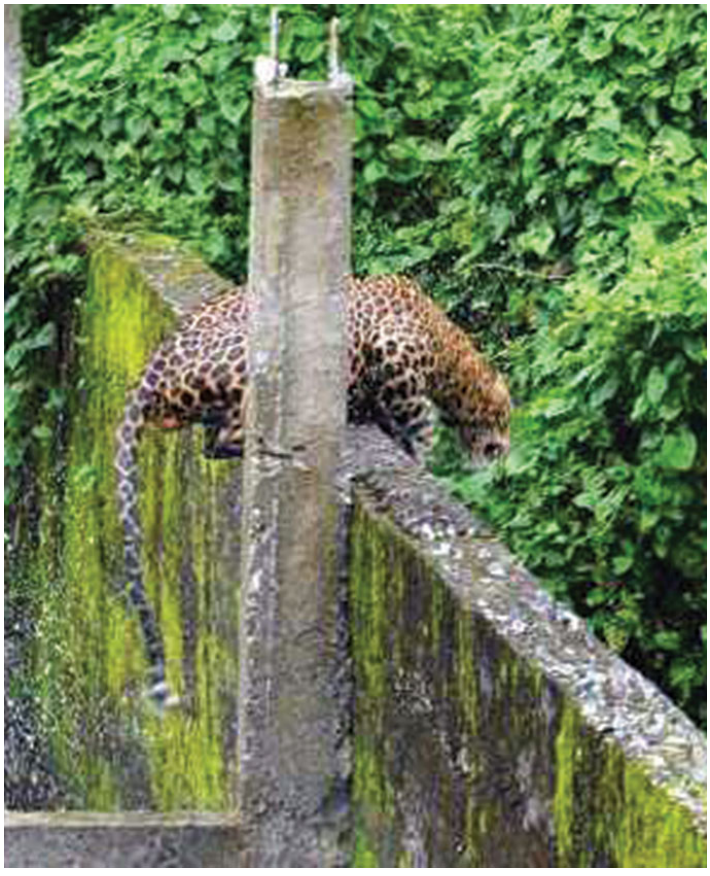


© Anwar Ahmed (All photos in this paper)

Background:

On 21/06/2013 (Friday) at 10.30 AM, I received a call from Air Force Station, Kolshet informing me that a leopard like animal was sighted in the high security area.

Observations:

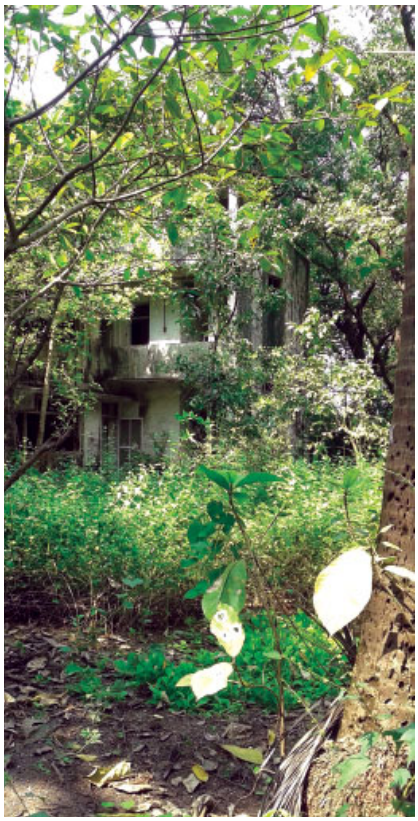
With the permission of my Range Forest Officer, Thane and as per his guidance, accompanied by two field staff, I rushed to the spot and inspected the area of about 8-9 acres It had dense forest with trees of 12 to 15 meters in height, and crown density of up to 0.7. Few 6-7 abandoned old buildings were also seen in the forest where we saw pugmarks of the leopard. Size of pugmarks indicated that it was a full grown leopard.

Methodology:

Near the Air Force Station is the Kolshet village and naval boundary beyond which is the naval area. I collected the information from the villagers and formed 2-3 informer groups in view of very short time at my disposal. None of the people had actually seen the leopard nor could they give accurate or useful information, but fear was present. I gave assurance to people that proper action will be taken by the forest department. I requested them to inform me as soon as the leopard was sighted; at the same time I warned them not to take any drastic action like killing the animal since it was an offence under wildlife (protection) act, 1972.

No leopard activity was reported in next two days.

On 24th June at about 11.10 AM, I received the awaited call of leopard sighting. The informer had continuous sighting of leopard in air force and navy area. I rushed to the area with RFO, Thane and visited the region of leopard sighting and again found pugmarks. A group including air force commander and one naval officer was formed and searching operation was launched. We heard barking of dogs and saw two leopards sitting on the compound wall of high security



area. From a distance of 120 to130 m we saw that the leopards were surrounded by 3-4 dogs who were barking continuously. Both leopards were silently staring at dogs. After about 10 minutes both leopard jumped from the wall and attacked 2 dogs and killed them before our eyes. The other dogs ran away.

The station commander requested me to put a cage for catching the leopards as the area was very important in security point of view. The commander also spoke with PCCF, Wild life, Nagpur, and in view of the seriousness of the issue the department granted us necessary permission immediately. We put up a cage in the premises on the same night at about 10.30 PM. The leopard was spotted again in the head-light of jeep while putting the cage in the premises, but it did not attack us.

Results:

After 3-4 days, when I visited the spot to keep prey bait in the cage at 10.00 AM the leopard was seen sitting silently about 200 m away from the cage. This indicated that it was well-acquainted with humans. We visited the cage at regular intervals to change the prey. After 4-5 days, we observed pugmarks near the cage but the leopard was smart enough not to step on the pedal of the trap. During our visits we spoke with local leaders, people and industry representatives about the importance of wildlife and that the reason behind our conflict with wild life was human encroachments on forest land, which was the rightful home of the leopards.

After about three months leopard sighting was reported from Hiranandani Estate as seen in CCTV of a building adjacent to the forest area. After watching the footage, I came to the conclusion that this was another leopard since the previous one was a full grown animal while the present one in CCTV was a sub adult. This identification was possible due to the guidance from my ACF's Dinesh Singh and Samir Deshpande.

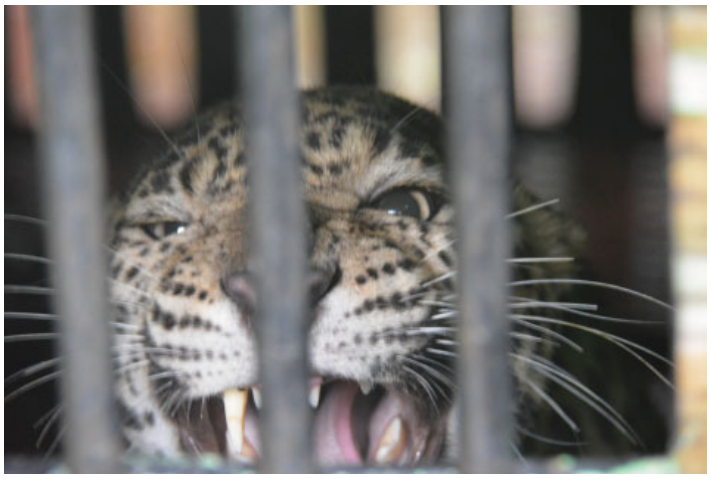
The CCF, Thane with DYCF and ACF visited all the areas where leopard was sighted and they requested TMC Commissioner to clear garbage and hold interactive meetings with MLA's, MP's and local residents. Additional four cages were deployed at different places. A female adult leopard was finally trapped on 24th September, 2013. The mission was successful without any injury. After this incidence, leopard sightings were not reported.

Note: The present communication is aimed to share our experiences with the forest staff in view of increasing incidences of human wild life conflict with a hope that our method shall be useful to them while addressing the serious situations.

Recommendations:

We made the following recommendations:

1) The population of stray dogs should be controlled near forest areas.
2) Garbage should be regularly cleaned.
3) Various awareness sessions should be taken regularly at housing societies situated near forest area.
4) Abandoned buildings should be demolished.
5) Waste food should not be thrown on open areas especially adjacent to National Parks.
6) Residents should be taught to take care of themselves.
7) Banners or hoardings should be put up near all societies near forest areas mentioning do's and don'ts about wildlife sighting.
8) Digital data compilation about wild life in the range should be done yearly. This will be helpful to formulate new approaches or action to be taken immediately in case of man animal conflict.



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White-eyed Buzzard *Butastur teesa* feeding on Common Trinket Coelognathus helena in Gir National Park, India

Devvratsinh Mori & Pinal Patel

Mori, D., & Patel., A.. 2017. White-eyed Buzzard Butastur teesa feeding on Common Trinket Coelognathus Helena in Gir National Park, India, [Devvratsinh Mori, opp. Darbar gadh, Wadhwan 363030,Gujarat, India. E-mail: devvratsinhmori@gmail.com, Pianal Patel, 11, Shrinath society, Usmanpura, Ashram road, Ahmedabad – 380013, Gujarat, India., E-mail: pinalmost@gmail.com]

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Referee: Pramod Deshpande

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White-eyed Buzzard *Butastur teesa* is a medium sized resident hawk from family Accipitridae. It is distinct from the true Buzzards in the genus Buteo. It occurs in South Asia inlcuding India. It is listed as 'Least Concern' by Birdlife International 2017. This species widespread throughout the Indian subcontinent (Naoroji 2006) and is a fairly common resident in Gujarat (Ganpule 2016), where it is regularly observed in good numbers.

It is a generalist feeder has been recorded to consume a variety of rodents, small squirrels, small snakes, skinks, frogs, crabs, locusts, grasshoppers, winged termites, crickets, and large insects. It also rarely preys on birds up to the size of quails and partridge chicks. Unusual record includes an adult buzzard killing a Black-naped Hare *Lepus nigricollis*. Only one species of snake Striped Keelback Amphiesma stolata is reported in its diet (Naoroji 2006). On 13 December 2016, we conducted a preliminary raptor survey trip to Gir National Park, Gujarat. It was little chilly with golden light in the evening and we were in the middle of a dry portion of the forest, We observed one individual adult White-eyed Buzzard flying towards a large sized of Common Trinket Snake *Coelognathus helena* moving on the ground. The buzzard in a single swoop held it in its sharp claws carried it with him to almost 300 to perch on a bare branch of *Tectona grandis*. The buzzard started swallowing the snake from its mouth end, and we observed the act for 15 minutes from our Jeep. The buzzard then flew away. It is likely that in winter the snakes become less active and probably more vulnerable to predation.

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Record Sighting of Short-eared Owl *Asio flammeus* in Dhule District, Maharashtra.

Aakash S. Hire, Anant A. Nikam & Kunal B. Khairnar
(akash.hire77@gmail.com; anantunipune0@gmail.com; Kkhairnarkunal08@gmail.com)

Citation: **Hire, Aakash S., Anant A. Nikam & Kunal B. Khairnar.** Record Sighting of Short-eared Owl *Asio flammeus* in Dhule District, Maharashtra. *Ela Journal of Forestry and Wildlife* 6(2): 391

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Referee: Dr. Vaibhav Deshmukh

- **Name of the Species-** Short-eared Owl
- **Scientific Name-** *Asio flammeus*
- **Status-** Least concern ver 3.1 (IUCN)
- **Date of Sighting-** 13th February, 2017
- **Time of sighting-** Around 10.45am
- **Weather Parameter-** Clear sunny
- **No. of time Sighted-** Single
- **Gender-** Unknown
- **Locality-** Ambode (16km from Dhule city)
- **Distance from Human Habitat-** 2.5km from village Ambode and 2 km from village Navalnagar
- **Behaviour-** Was seen to be active during day time
- **Threat-** These semiarid habitats are threatened due to conversion into croplands, with diminishing original habitats
- **Photograph-** Attached.
- **Habitat-** Semi arid, surrounded by agriculture fields.
- **Previous record-** Not certain.

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Recent Sighting of Yellow-legged Buttonquail *Turnix tanki* in Pune, Maharashtra

Swapnil K. Thatte, Rohan Joglekar, Santosh Gulavani
(Email: swapnil.thatte@gmail.com; rohan97.jog@gmail.com; santoshgulavani@hotmail.com)

Citation: Thatte, Swapnil K., Rohan Joglekar, Santosh Gulavani, Recent Sighting of Yellow-legged Buttonquail *Turnix tanki* in Pune, Maharashtra.
Ela Journal of Forestry and Wildlife 6(3): 426

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1 July 2017

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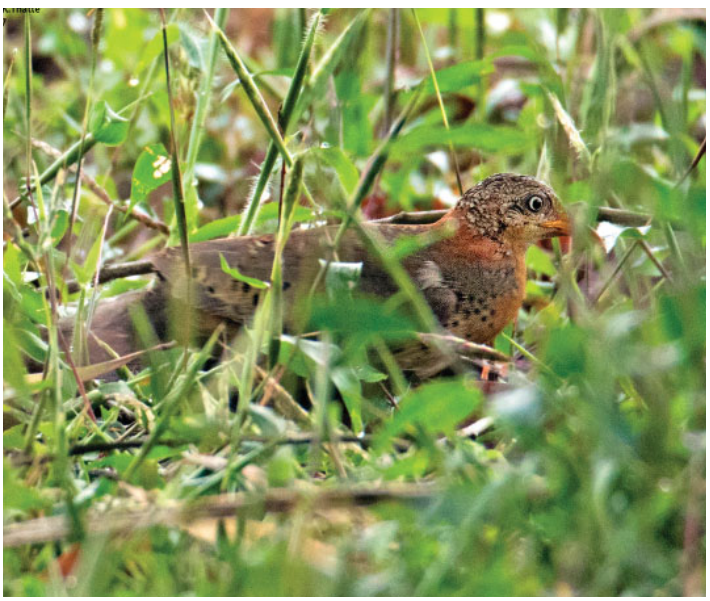
Referee: Pramod Deshpande

- **Name of species-**Yellow-legged Buttonquail.
- **Status-** Least Concern (IUCN 3.1)[1]
- **Date of sighting-** 15th September, 2017.
- **Time of sighting-** 08.30 a.m.
- **Weather parameters-** Overcast.
- **Number of times sighted-** Once.
- **Number of birds-** 1.
- **Gender of bird-** Female.
- **Locality-** Mulshi, Pune.
- **Habitat description –** Grassy patches near dense forest, length of grass less than 1ft.
- **Distance from human habitation-** 5km.
- **Any other bird/animal associates- No.**
- **Bird behaviour-** Extremely shy, saw it foraging in roadside grass & heard its low frequency calls before it disappeared into a thicket.
- **Threats-** Habitat loss.
- **Photographs-** Attached.
- **Previous records-** No documented record from the region.



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