

First report of Amur Falcon, *Falco amurensis* Radde, 1863 from Chhattisgarh, India

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ABSTRACT

Of the 69 species of raptors known from India, Amur Falcon (*Falco amurensis*) was one of the least talked about species till recently. Primarily recorded from northeast India, with a few scattered sight records in peninsular India, the species is generally considered rare. All that changed following a report by Conservation India in October 2012 of the massive large scale harvest of these falcons in Nagaland. Researchers estimated that between 120,000 and 140,000 individuals were being trapped and killed for human consumption in just one location in Nagaland at the Doyang roost site in Wokha district each year (Dalvi *et. al.* 2013).

Key words: Amur falcon, Bastar Plateau, Rajnagar tank, Oligotrophic, Chhattisgarh;

INTRODUCTION

Amur Falcon also called the Eastern Red-Footed Falcon, is a small bird of prey and is a long distance, trans-equatorial migrant (Bildstein 2006), travelling from eastern Asia all the way to southern Africa and back every year. Annually, in early autumn, these migrant falcons leave their Asian breeding range and travel to parts of northeast India and Bangladesh that act as staging areas for the overland flights across India (Ali & Ripley 1987; Naoroji 2011).

Words Amur and amurensis derived from Amuria or Amurland, the drainage area of the Amur river bordering China and Russia, from where the first specimen described (Naoroji 2011).

Widespread autumn passage migrant. In all plumages, has red to pale orange cere, eye-ring, legs and feet. Male and female are strikingly different in

plumage. Female looks bulkier and heavier than male. Male is dark grey, with rufous thighs and undertail-coverts and white underwing-coverts. Female has dark grey upperparts, short moustachial stripe, whitish underparts with some dark barring and spotting, and orange-buff thighs and undertail-coverts; uppertail barred; underwing white with strong barring and dark trailing edge.

Highly gregarious and crepuscular falcon. Forms communal roosts, often with Lesser Kestrels. Hunts by hawking insects and by hovering like Common Kestrel. Open country. (Naoroji 2011 and Grimmett *et al.* 2011). However, this species and similar species has been unreported from Central India till date (Chandra & Singh 2004, D'Cunha & Ali 2001, Chandra *et al.*, 2015). Sighting record of one adult male and three females by Hashim Tyabji (Naoroji 2011), from Bandhavgarh Tiger reserve (C.f.508.43 km from the present sighting locality) located in the state of Madhya Pradesh in the central Indian highlands of the Deccan Peninsula. However there have been no photographic documentations of the earlier sight records (D'Cunha, pers. Comm, 2016).

This species has been also reported from Nellore, Rajmundry and Madurai districts of Andhra Pradesh and Tamil Nadu, and a single record from Kerala (Nair, 1994). This species reported from Nellore district of Andhra Pradesh is an extension of Deccan

How to Site This Article:

Sushil Kumar Dutta (2016). First report of Amur Falcon, *Falco amurensis* Radde, 1863 from Chhattisgarh, India. *Biolife*, 4(3), pp 437-440.

DOI: <https://dx.doi.org/10.5281/zenodo.7318797>

Received: 4 July 2016;

Accepted; 21 August 2016;

Available online : 2 September 2016

Traps, which is the closest distribution record and c.f. 251.73 km from the present sighting locality. The migratory route of the species has been tracked through satellite by R. Suresh Kumar 2015.

This species has an extremely large range, and hence does not approach the thresholds for Vulnerable under the range size criterion (extent of occurrence <20,000 km² combined with a declining or fluctuating range size, habitat extent/quality, or population size and a small number of locations or severe fragmentation) (Bird Life International (2016).

MATERIAL AND METHODS

Rajnagar tank (Dam) was completed in the year 1983 located at 19° 15' 56.4" N & 82° 6' 34.7" E. 572 msl. Tank is about 26 Km away from Jagdalpur city towards north-east direction.

The tank is Homogenous type with a Water spread area FTL (Full Tank Level)-105.20 Acres (42.572 ha) and LSL (Lowest Sealed Level) - 22.61 Acres (9.149 ha). The tank is Oligotrophic. Only *Alternanthera philoxeroides* plants can be seen at the edges of the tank. (Figure-1).

Two full grown mango trees stand nearby. Only small grasses and very few Ipomea plants are scattered in the vicinity. By and large the land is barren in the north and a vegetable farm is also located. A few power lines can also be viewed therein. The land is barren in the east and a forest plantation is located beyond it.

Figure-1 Rajnagar tank



The Bastar Plateau is also known as the Plateau of Dandkaranya which is located in the southern most part of Chhattisgarh state. It extends between latitudes 17°46' and 20°34' North and longitudes 80°15' and 82°1' East with an area of about 39,060 sq. km. It is drained by the tributaries of Indravati and Sabri rivers, which finally join the river Godavari. Physiographically, the Bastar Plateau can be grouped into five main divisions, viz. Kotri-Mahanadi Plain in the north; Abhujmar Hills; north-eastern plateau (Indravati Plains); southern plateau including Bailadila Hills, Tikanpalli

Hills and Dantewara Plain; and Godavari-Sabri lowland. Biogeographically, whole of Bastar plateau is included in the Eastern Highlands (6C) province of the Deccan Peninsular bio-geographic zone of India (Rodgers *et al.*, 2002). At present the plateau area comprises 7 districts under two main administrative regions viz. Uttar Bastar-Kanker, Kondagaon, Narayanpur and Dakshin Bastar-Dantewada, Bijapur, Bastar and Sukma.

The climate of the area is more or less pleasant round the year, with four different seasons viz., south-west monsoon (mid-June to September), post-monsoon (October and November), winter (December-February) and summer (March to mid-June). The minimum temperature varies from 11°C in December to 24°C in May and maximum temperature ranges between 26°C to 38°C in May. The mean annual precipitation is about 1500 mm.

Bastar plateau is blessed with an exceptional proportion of lush green forest cover. The region accounts for nearly 12% of total forest cover of the state including one Tiger Reserve, Indravati Tiger Reserve (ITR) and two Sanctuaries, Bhairamgarh and Pamed Wildlife Sanctuary (Bijapur district) and one National Park, Kanger Valley National Park (KVNP) (Bastar district). According to Champion and Seth (1968) the forest type of Bastar plateau can broadly be divided into three classes, viz. Moist peninsular Sal (3C/C2e), Southern moist mixed deciduous forest (3B/C2) and Slightly moist teak forest (3B/C1c). The area is rich and unique in its faunal composition as well. Fauna shares characteristics of both northern and southern elements of the country.

RESULTS

First Sighting: 12-11-2015 3:42 PM



On 12-11-2015 at 3:42 PM one bird first descended down to the north eastern side of the dam. Then moved on to a nearby power line. Then took some small flights and again perched on the power line.



Second Sighting: 13-11-2015 8:47 AM



Very next morning on 13-11-2015 at 8:47 AM one bird of the same species was sighted perched on the power line. Soon after it flew away across the farm house, reacting to the loud, baying music coming from the farm house.

These birds, on their trans-equatorial migration come from China and north east and fly across to the South Africa in the south west. They usually return in March-April from South Africa and fly away to far north east. But in February, March and April I made several visits to the spot where I had sighted the bird but it was not to be seen.

So this can be claimed as the first ever photographic documentation of the bird in Central India.

The two sighting events revealed most of the morphological characters helpful for identification. On flight and perching following characters were observed. Both individuals sighted are females on the basis of following field characters:

When perched in broadside view whitish cheeks contrast with dark ashy-brown crown; yellowish orange cere and pale orange-yellow base to bill and dull orange legs and feet are remarkable pointers.

In overhead flight adult female displayed whitish, heavily streaked underparts (breast and under belly) in contrast to pale, unmarked lower belly to under tail-coverts, along with conspicuous orange feet. Other useful field characters: barred flanks; barred and mottled underwing-coverts; barred dark-tipped flight feathers; tail with broader sub terminal band tipped paler; conspicuous black moustachial stripe; unmarked buff-white chin, throat and rear coverts, and dark trailing edge to flight feathers. At close quarters buff to pale rufous-buff on thighs and vent is visible. From the above markers the bird can be confused with the Eurasian Hobby but overall grey and closely barred entire upperparts, prominently on mantle, upperwing-coverts and tails; viewed at a distance it can appear mottled on upper body due to the whitish feather edges. Upper wing-coverts and tail contrast weakly with blackish flight feathers. Viewed at close range pale forehead and dark-streaked head are determining features (Naoraji 2011 and Grimmett *et al.* 2011).

Bastar Plateau is one of the well surveyed areas of Chhattisgarh in terms of faunal documentation. Recent surveys yielded significant results with report of Black-naped Oriole, Ruby-cheeked Sunbird (Chandra *et al.*, 2015), the rare bird Rufous-bellied Eagle (Dutta, 2015a), Spot-billed Pelican *Pelecanus philippensis* (Dutta, 2016), the critically endangered sacred grove bush frog *Raorchestes sanctisilvaticus* (Dutta, 2015b) and the endangered bird species; *Gracula religiosapeninsularis*, locally called as hill myna or the Bastar myna.

Hence it is presumed that systematic and long term, intensive survey in the area will result in finding more interesting species from Bastar plateau. Furthermore, action plans can be prepared for saving these conservation dependent species from the catastrophic habitat destruction.

Several raptors like Common Kestrel, Pallid Harrier, Short toed Eagle, Montagu's Harrier, Osprey and atleast ten water dependent winter migratory birds like Northern Pintail, Common Teal, Great Crested Grebe, Brown-headed Gull, Kentish Plover, Common Redshank, Green Sandpiper etc. visit Rajnagar tank every year.

According to R. Suresh Kumar (2015) this migratory stop-over and roost is believed to be the largest and most spectacular roost of any species of falcon ever seen. As of now, there are no clear estimates of the population passing through the region and the migratory routes and other station sites across India are unknown. India, as a signatory to the Convention on Migratory Species (CMS), is obligated to prevent hunting, and provide safe passages besides chalking out effective action plans for the long-term conservation of this bird.

The migratory path preference of the bird suggests that it might be a common species in different areas of central India but it remained unnoticed because of its migratory hurry to reach the S African coasts. Bastar district is largely inhabited by several tribal communities

who hunt birds and it is common knowledge that the local tribes poach this species along with other birds.

Conflict of Interests

Authors declare that there is no conflict of interests regarding the publication of this paper.

Acknowledgements

I am thankful to Dr. Eric D'Cunha, Prof M.L. Naik, Dr. Muntaz Khan, Prof. V.C. Awasthi and Dr. P.R.S. Nagi for helping in identification of bird, plants, preparation of the manuscript and for thorough help.

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