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Red-naped Shaheen
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Nirav Bhatt & Prasad Ganpule

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Introduction

Three subspecies of the Peregrine Falcon *Falco peregrinus* occur in India: The resident Black Shaheen *F. p. peregrinator*, the migratory Tundra Peregrine Falcon *F. p. calidus*, and the Red-naped Shaheen *F. p. babylonicus* (Naoroji 2006). The Red-naped Shaheen is a winter visitor to western India, mainly in Gujarat and in the Delhi area, straggling eastwards to the Gangetic Plains and northern Madhya Pradesh—visiting, mainly, desert and semi-desert areas (Rasmussen & Anderton 2012). It breeds mostly in Central Asia, from eastern Iran to Mongolia (White *et al.* 2017).

We present here the results from our study of its status, and distribution, in north-western India. We also attempt to describe how it may be separated, in the field, from the wintering *calidus* subspecies.

Taxonomy

The taxonomy of the Red-naped Shaheen is complex, and unresolved. Rasmussen & Anderton (2012) treat it as a subspecies of the Barbary Falcon *F. pelegrinoides pelegrinoides*, which they consider is a separate species from the closely related Peregrine Falcon. Other authorities, however, consider *pelegrinoides* a race of *Falco peregrinus*, and not a separate species (see Table 1). Grimmett *et al.* (2011) give only *F.* (*peregrinus*) *pelegrinoides* for the Barbary Falcon, including the Red-naped Shaheen in the given taxon. That this is certainly a taxonomy in flux is best shown by the fact that the Barbary Falcon was treated as a separate species by Dickinson (2003), but subsequently, it became a subspecies of the Peregrine Falcon in Dickinson & Remsen (2013). For the different treatment meted to the Red-naped Shaheen in various works, see Table 1.

Table 1. Red-naped Shaheen: Taxonomic treatment

Falco pelegrinoides babylonicus	*Falco peregrinus babylonicus*
Ferguson-Lees & Christie (2001)	Kazmierczak (2000)
Rasmussen & Anderton (2012)	Ali & Ripley (2001)
Oriental Bird Club / Images	Forsman (2006, 2016) Naoroji (2006) White *et al.* (2017) (website)

A recent DNA study suggests conspecific status with other peregrines (White *et al.* 2013b). Another recent authoritative monograph on Peregrine Falcons treats the Red-naped Shaheen as a subspecies of *Falco peregrinus* (White *et al.* 2013a). Forsman (2016) states that, 'pending further genetic studies and given the extensive apparent hybridisation with Peregrine, Barbary Falcon is treated as a subspecies of Peregrine.' Praveen *et al.* (2016) also treat the Red-naped Shaheen as a subspecies of the Peregrine Falcon in their India Checklist. While Clark & Shirihai (1995), and Clark & Davies (2000) suggested the merging of the Barbary Falcon, and the Red-naped Shaheen into one form, since they had similar plumages, White *et al.* (2013a) examined both forms, and showed that there were differences, and that isolated breeding specimens, though superficially similar, were distinct.

A comprehensive study of falcons, based on multiple molecular techniques (Fuchs *et al.* 2015), strongly supports treating *F. pelegrinoides* as a full species. Though fuchs *et al.* (2015) do not provide taxonomic recommendations for *babylonicus*, the Ornithological Society of the Middle East (OSME 2016) treated the Red-naped Shaheen as a subspecies of *F. pelegrinoides*, further qualifying that though more studies on molecular relationships are required.

Due to the aforementioned complex taxonomic status of the Red-naped Shaheen, we treat it here as a subspecies of the Peregrine Falcon, fully aware that this might change in the future.

Henceforth, in this note, we refer to the Red-naped Shaheen as *F. peregrinus babylonicus*, the migratory Peregrine Falcon as *F. p. calidus*, the Barbary Falcon as *F. p. pelegrinoides*, and the resident Black Shaheen as *F. p. peregrinator*.

Methods and observations

We carried out extensive surveys in the Little Rann of Kachchh, and in the Greater Rann of Kachchh (both in Gujarat) from 2006 to 2017. We also visited the Desert National Park, Tal Chappar, Jorbeed (near Bikaner), and various other locations in the states of Gujarat and Rajasthan. Details of our sightings of *babylonicus*, and those of other observers, from north-western India between 2008 and 2017, are given in Table 2.

A few images, given below, are cross-referenced in Table 2. Though we have thoroughly searched for records of *babylonicus* from north-western India, it is possible that we may have missed

Table 2. Photographic records of *babylonicus* from north-western India between 2008 and 2017

Sr No	Place	Date	Observer	Remarks
1	Okhla Bird Park, Delhi	01 January 2008	Arya (2008)	Adult
2	Little Rann of Kachchh, Gujarat	18 November 2008, 18 January 2009	Author's sighting (PG) **[126]**	Ganpule 2011
3	Greater Rann of Kachchh, Gujarat	02 December 2008	Francis (2008)	Adult
4	Banas River, near Ranthambhore, Rajasthan	02 December 2009	Khandal (2009) **[128]**	Adult with a Juvenile
5	Greater Rann of Kachchh, Gujarat	11 December 2009	Mishra (2009) **[130a,b]**	Juvenile
6	Greater Rann of Kachchh, Gujarat	December 2009	Shurpali (2009)	Juvenile
7	Little Rann of Kachchh	05 February 2012	Author's sighting (PG) **[120]**	Adult
8	Tal Chappar, Rajasthan	25 January 2012	Poonia (2012)	Adult
9	Little Rann of Kachchh, Gujarat	30 December 2012	Mori (2017)	Juvenile
10	Greater Rann of Kachchh, Gujarat	05 December 2014	Soumen Mahato, Jugal Tiwari: FB	Adult
11	Little Rann of Kachchh, Gujarat	07 December 2014, then seen till February 2015	Vihol (2014) **[132]**	Juvenile
12	Little Rann of Kachchh, Gujarat	21 December 2014, 25 January 2015	Author's sighting (PG & NB) **[121]**	Adult
13	Little Rann of Kachchh	22 December 2014	Mori: FB	Adult
14	Dhanauri Kalan, Uttar Pradesh	28 January 2015	Arya (2015) **[123]**	Adult
15	Mansarovar Lake, Sariska, Rajasthan	15 February 2015	Singh (2015)	Adult
16	Near Dantiwada, North Gujarat	01 March 2015	Nirdosh Gupta *(pers. comm.)*	Juvenile
17	Little Rann of Kachchh, Gujarat	20 November 2015, then regularly seen till February 2016 in the same area	Author's sighting (NB) **[124a,b]**	Adult
18	Little Rann of Kachchh, Gujarat	20 December 2015	Author's sighting (NB) **[122]**	Adult
19	Gurdaspur, Punjab	December 2016	Sandeep Beas: FB	Adult
20	Greater Rann of Kachchh, Gujarat	04 January 2016	Tiwari (2016) **[129]**	Juvenile
21	Greater Rann of Kachchh, Gujarat	04 January 2017	Jaysukh Parekh (*pers. comm.*)	Juvenile
22	Greater Rann of Kachchh, Gujarat	11 January 2017	Jainy Maria (*pers. comm.*) **[125]**	Adult
23	Barabanki, Uttar Pradesh	February 2017	Atul Singh Chauhan: FB	Juvenile

Abbreviations: FB=https://www.facebook.com group, Raptors of India; INW=http://indianaturewatch.net; OBI=http://orientalbirdimages.org.

some personal records of birdwatchers who have not shared their images on birding forums. Some of the individuals mentioned in Table 2 have been photographed multiple times by several bird photographers. We have carefully browsed through all the photographs available on websites like INW (indianaturewatch.net), and OBI (orientalbirdimages.org), various birding groups on Facebook, and other birding forums, and ensured from the locality, and plumage, that there are no definite new individuals which we have not covered in Table 2. Some individuals, posted on these websites as *babylonicus*, are misidentified, and so we have not included them in Table 2. We have also not included records of birds that could be *babylonicus*, but whose photographs are of too poor a quality to decipher finer details, or for which, only a single image is available. We prefer to err on the side of caution in such cases. We have excluded sighting records from 'eBird' (http://ebird.org/content/india/), since photos were not posted along with the bird lists, and field identification is quite difficult, especially of juveniles. We have included only those sightings which are well documented through photographs, and where identification is beyond any doubt.

Identification

Adult *babylonicus* is quite easily separated from *calidus*, since the rufous wash on the cheeks, nape, and the underparts is quite apparent, and is a diagnostic feature for identification. However, some birds may show very limited rufous on the cheeks and nape, which may lead to confusion if seen from a certain angle. Some *babylonicus* show limited rufous on the nape, and are not 'red-naped' in the true sense. Such individuals have a darker nape, showing faint rufous nape feathers. On the other hand, some adult *calidus* may show a paler nape area, most often being pale white, or greyish, but sometimes even pale buffish-white, leading to more confusion, and the risk of misidentification (Andrea Corso, *pers. comm*.). Hence, it is advisable to get good views, from all angles, to confirm the identification, as the distinctive rufous cheeks are usually seen only when viewed closely.

There are two basic colour forms in *babylonicus*: Dorsally, the colouration ranges from dark (blackish) to an almost pale cerulean bluish-grey—with a wide range of intermediate colours. The pale bluish and large birds are said to occur in north-western China and Mongolia (the eastern part of its range), while the darker birds occur from Turkmenistan, eastwards to the adjacent Central Asian countries, and pale and small birds occur in Iran and Afghanistan (the western most part of its range) (White *et al*. 2013a). All types of forms are seen in the winter in north-western India, which is also confirmed by museum specimens (White *et al.* 2013a). The photographs of adult birds published in this paper

[120–127] show well the variability, with dorsal colour ranging from blue, to dark bluish-grey, pale grey, dark grey and black. Ventrally, it is pale creamy to dark rufous, with only faint barring on the belly and flanks. Some individuals may show prominent barring (mostly female or first adult birds) (Andrea Corso, *pers. comm.*), but this is uncommon and most adult birds seen in the study area have plain rufous underparts with narrow, sparse barring. Some of the palest birds are a solid peachy-buff with only slight, barely perceptible, markings on the flanks and thighs, and if markings are present in the centre of the breast, they are usually spots or tear drops, rather than bars, except in the darkest individuals (White *et al.* 2013a). A few darker individuals noted here had somewhat prominent underpart markings, which are more pronounced on the flanks and thighs [see **124a**].

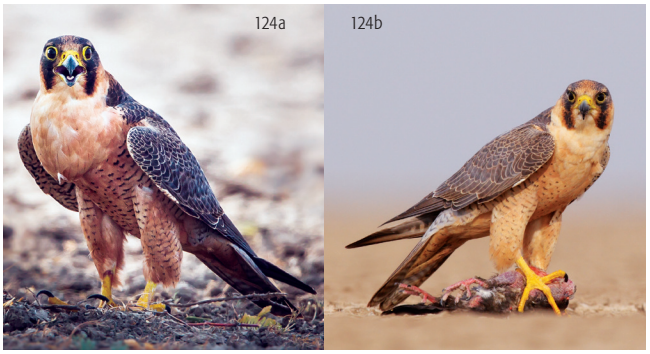
Swadeepsinh Jadeja

120. Adult *babylonicus*. Note rufous nape and cheeks. Dark bluish-grey upperparts and rufous underparts with very less barring. Little Rann of Kachchh. 05 February 2012.

Anand Arya

123. Adult *babylonicus*. Note pale grey upperparts and rufous underparts with almost no barring. Also note rufous cheeks. This individual lacks any blue tones on the upperparts and the upperpart colour is similar to a pale *calidus*. 28 January 2015. Dhanauri Kalan, Uttar Pradesh.

121. Adult male *babylonicus*. Note pale bluish-grey upperparts and rufous nape and cheeks. This individual had rufous underparts with almost no barring. The bluish tones on the upperparts are prominent. 21 December 2014. Little Rann of Kachchh.



L: Jainy Maria
R: Nirav Bhatt

124a,b. Adult *babylonicus*. This adult female was seen in the same area for more than two months. Note the blackish upperparts and the rufous underparts with noticeable barring on the belly and flanks, which is usually not seen in adult *babylonicus*. Such darker individuals of *babylonicus* are impossible to separate from *pelegrinoides* without DNA analysis and measurements, and it is not possible to determine the subspecies. Little Rann of Kachchh. 24 November 2015.

Pics: Nirav Bhatt

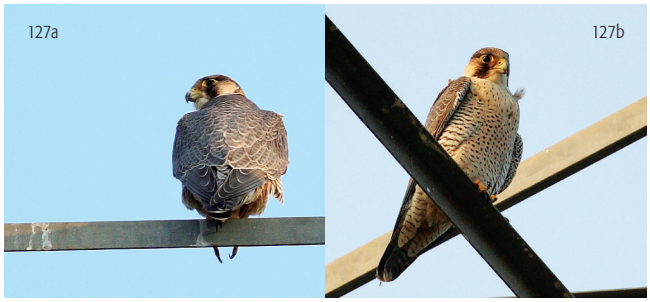
122. Adult male *babylonicus*. Note the very extensive rufous head, nape and the moustache. The underparts are plain and washed with rufous, with faint barring on the flanks. The upperpart colour is darker greyish-blue. 20 December 2015. Little Rann of Kachchh.

Jainy Maria

125. A dark adult *babylonicus*. Greyish-black upperparts. Rufous cheeks, barring on the flanks and thighs. Note that the scapulars have started moulting (in early January) and new feathers are seen, indicating start of body moult. A hint of pale supercilium is seen above the eye. 11 January 2017. Greater Rann of Kachchh.

Prasad Ganpule

126. Adult *babylonicus* in flight. Rufous underparts with barring on the flanks. Compact structure with pretty obvious short tail. Plain, pale rufous lesser coverts. The barring on the primaries and secondaries is quite prominent. 18 January 2009. Little Rann of Kachchh.



J. Pranay Rao

127a,b. Adult. The upperparts are typical pale blue-grey seen in adult ***babylonicus***. But note the underparts; the heavy barring without any rufous. However, a faint rufous wash on the cheeks and on forehead is apparent. This could be first adult plumage or possibly an intergrade with another subspecies, or simply a very well-marked old female. The breeding origin of such birds is unknown. Winter 2010. Hyderabad.

These features give it a very distinctive appearance, and birds in adult plumages are fairly easily identified from *calidus*. Although some adult *calidus* can show pale pink to rufous wash on the underparts in adults (*pers. obs.*), this is faint and does not extend on to the head, cheeks and nape, thus separating it from *babylonicus*. Further, the faint salmon-pink wash observed in adult *calidus*, is typical of very fresh plumage and quickly is lost due to abrasion and sun-bleaching (Andrea Corso, *pers. comm.*).

The separation of adult *babylonicus* from typical *peregrinator* is also relatively straight forward; *peregrinator* shows a deeper rufous wash on the underparts, has a more 'hooded' appearance with a very small (or absent) cheek patch (due to its very broad moustache) and is dorsally dark grey or black, as against prominent rufous cheek patch, a distinct moustachial stripe and reddish crown in *babylonicus*. The underparts in *babylonicus* are usually less intensely coloured than *peregrinator*, and the upperpart colour in *peregrinator* is darker. Similarly, a juvenile *peregrinator* can be separated from *babylonicus* by a hooded appearance, broader moustache mark and, usually, a dark rufous wash to the underparts. However, there is extensive plumage variation in populations of southern and northern *peregrinator* in India (White *et al*. 2013a). The separation of juvenile and adult *peregrinator*, which are not 'typical', from *babylonicus*, is beyond the scope of this work.

The problem of separating the juvenile of a *babylonicus* from that of a *calidus*, by plumage, is well known, and White *et al.* (2013a) state that even museum specimens of *babylonicus* are sometimes mistakenly labelled '*calidus*.' This is reflected in the field too, when identification of some juveniles is often quite difficult. This is especially problematic with pale and sparsely streaked juvenile *calidus*, which are quite similar to juvenile *babylonicus*. Naoroji (2006) states that 'some exceptionally pale *calidus* juveniles may show thin, scattered brownish streaking below.' Even the head pattern—broad pale supercilium, narrow dark moustache contrasting prominently with a wide pale cheek patch—and the dorsal colour in many pale juvenile *calidus* closely matches juvenile *babylonicus*. It is well known that the juvenile *calidus* is very variable, with underparts varying individually in ground colour, from buffish white to yellowish ochre, and the dark streaking on the breast may be heavier or finer (Forsman 2006, 2016). Both species occur in the Little Rann of Kachchh, and their separation becomes difficult.

The various texts do not give details regarding separation of juvenile *calidus* from *babylonicus*, except general identification pointers. Based on our experience of *calidus* and *babylonicus* in Gujarat, and studying photographs of both, the following features are useful in the identification of juvenile *babylonicus*:

1. Upperparts: Usually pale brownish, with rufous edges to the feathers. But this latter is variable, ranging from dark brownish to blackish. Frequently, the pale tips and fringes to the upperpart feathers are completely worn (or very faint) in winter.
2. Size and structure: In general, *calidus* is usually much larger and bulkier than *babylonicus*. However, this is difficult to judge in the field without direct comparison. This is usually apparent in male *babylonicus* as it is quite small in size. The female *babylonicus* may be as large as a male *calidus*, and hence this is not very conclusive unless both are seen together. But in general, *babylonicus* is more slim and compact. Further, *calidus* is usually appreciably longer in the tail and wings, with a narrower and longer 'hand' (being a very long distant migrant), although to detect such differences in their jizz requires great experience (A. Corso, *pers. comm.*).
3. Underparts: The base colour of the underparts is pale rufous to creamy but may become whitish by first winter. Many of the juveniles seen in north-western India in the winter have whitish or only pale cream underparts. The underpart streaking is also very variable, with very fine and sparse streaking in most individuals, but a few show slightly thicker streaking, which usually forms lines on the breast and belly. Importantly, the streaking is usually concentrated into the central area, with the throat and upper breast, and the lower belly and thighs often remaining unmarked and whitish. Often, a rufous hue is seen on the upper breast and belly.
4. Plumage and moult: By winter, most *babylonicus* show more worn plumage than *calidus*. This is due to the fact that *calidus* is an Arctic breeding bird while *babylonicus* is a more southern breeder. Though the breeding season varies, *babylonicus* usually breeds from early February to April (White *et al*. 2013a), with the young fledging by the end of May. The juveniles of the northern breeding *calidus* usually fledge in August (Dixon *et al.* 2012). Hence, there is a difference of almost three to four months in their breeding periods. This is also confirmed by the fact that most records of *babylonicus* here are between mid-November till the end of February, while *calidus* is seen in Gujarat till mid-May, indicating that *babylonicus* returns early to its breeding area. This difference in moult timings is important in separating the two. Further, most *babylonicus* breed in dry, desert-like conditions and the feather edges

quickly abrade. By December, most *babylonicus* show worn plumage, with abraded tips to dorsal feathers, which are bleached due to wear, and the head and mantle feathers are also frequently moulted to adult-like plumage; correspondingly, *calidus* are in relatively fresh plumage. Thus, in November–December, *calidus* have less wear to the plumage, especially dorsally, compared to *babylonicus*. Many *babylonicus* show adult feathers on mantle and head by the end of January, thus showing a more advanced moult than *calidus*. The general state of the plumage in winter is an important feature in separating the two, a difference not reported in the main reference texts. The difference in moult timing is used in separating adult *peregrinus* from *calidus*, as *peregrinus* moults all primaries after breeding while *calidus* completes its moult in winter, post migration; the moult is suspended during migration, and is completed in late winter (Forsman 2006, 2016). Hence, this feature can be used also in separating *babylonicus* from *calidus* in early winter.

5. Bare parts: Cere, orbital skin, and eye ring pale yellow to darker yellow. Feet yellow in juveniles. Fledging *babylonicus* have bluish cere and eye ring, which turns yellow post fledging. By autumn, the cere and eye ring are pale yellow to yellow in *babylonicus*, while *calidus*, being a late breeder, shows a grey cere till late winter. Though the colour/s of bare parts is also based on diet (carotenoids), the difference in the breeding periods of *calidus* and *babylonicus* makes this feature very important. This is considered to be diagnostic in separating juvenile *pelegrinoides* from juvenile Peregrines (Clark & Shirihai 1995). Shirihai *et al*. (1998) state that *pelegrinoides* tends to acquire stronger yellow pigment in bare parts earlier (as early as September), but this is correlated with the timing of breeding. While this particular feature is not given in the reference texts for *babylonicus*, it should apply for separating *babylonicus* from *calidus*, especially in early winter, November–December, since both taxa are morphologically quite similar. An overwhelming majority of juvenile *calidus* that we have seen in Gujarat had a grey cere till the end of December, while all juvenile *babylonicus* had a pale yellow or yellowish cere in the same period. This is also seen in many photos of first winter juveniles posted on the Internet on many birding websites. While *calidus* may show a pale yellowish cere by January, this can be used for separation in early winter. Another useful feature is the eye ring, which in *babylonicus* looks thicker, with more bare skin in front of the eye. This is usually not seen in *calidus*. However, close views and good photos are needed to confirm these features.
6. Head pattern: The head patterns of juvenile *calidus* and *babylonicus* are surprisingly similar. Many *calidus*, especially pale-plumaged birds, are difficult to separate from *babylonicus*, as they show prominent white supercilium, white cheek patch, and pale forecrown. However, *babylonicus* frequently shows at least some rufous to the moustache, cheeks, and eyeline, with the supercilium being tawny in colour. However, pale *calidus* can sometimes show a light brownish wash on the moustache.
7. Tail pattern: Rather variable, but most *babylonicus* show a more prominent sub-terminal tail band. This is usually not seen in *calidus*. However, there is much overlap between the two and many *calidus* indeed show wider sub-terminal dark bars (at least the last two).

Table 3. Wing length of *babylonicus* and *calidus* after White *et al.* (2013a)

Species	male (in mm)	female (in mm)
babylonicus	269-298 (n=14)	314-330 (n=7)
calidus	296-323 (n=28)	330-364 (n=21)

The identification features described above are useful in the identification of most *babylonicus*. However, there are a few individuals of *calidus* that are extremely similar in plumage to *babylonicus* and are best left unidentified. A critical study of a large number of individuals is needed to verify whether the above mentioned features can be consistently applied for separating the two species. Clark & Shirihai (1995) noted that *pelegrinoides* and Peregrines are very similar in proportions. Looking at the proportions of museum specimens of *calidus* and *babylonicus* given in White *et al*. (2013a), there is indeed an overlap in measurements. However, the overlap in wing lengths of *babylonicus* and *calidus*, is minimal and this feature might be useful in separating the two. The wing lengths for both are given below in Table 3.

The morphometric measurements given in Abdulali (1969) also fall within the ranges for both the subspecies given above. The ratio of wing length to tail length can also be useful as *babylonicus* looks shorter-tailed, and its wing-to-tail ratio is larger than *calidus*. However, measurements of live specimens will help ascertain whether this can be applied to separate the two. In general, *calidus* clearly appears longer-tailed in the field, a difference mostly noticed in adults, as juveniles of both *taxa* have longer tails than adults, therefore making it harder to tell the differences in the field visually.

The juveniles of *babylonicus* shown here **[128–132]** represent the wide variation seen in juvenile plumages, with differences in upperpart colour, streaking on underparts, and head pattern. The *calidus* juveniles given here **[133–136]** are atypical individuals, similar to *babylonicus*, and difficult to separate. Some birds are impossible to assign to any subspecies without measurements, and are best left unidentified.

Finally, a comment on the juvenile *babylonicus* shown

Dharmendra Khandal

128. Juvenile *babylonicus*. This individual was seen with an adult, presumably its parent, which was typical adult *babylonicus* with bluish grey upperparts and rufous nape. Note the rufous tinged underparts with sparse streaking, the yellow cere and eye ring. Rufous wash on the cheek and whitish supercilium. A few adult-type feathers are seen on the mantle in December, indicating early moult, and further, the plumage is already rather abraded and sun-bleached, indicating an early fledging. Note the slim structure, looking much slimmer and compact than *calidus*. 20 December 2009. Banas River, near Ranthambhore, Rajasthan.

Jugal Tiwari

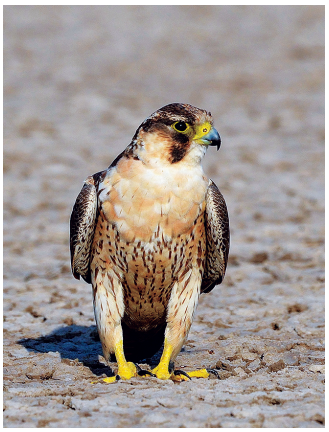
129. Juvenile *babylonicus*. Note the slim structure and the plumage. Mantle already shows adult-type feathers in early January, indicating advanced moult. This individual had whitish, almost unstreaked breast. The rufous on the cheeks is noticeable. The yellow cere and eye ring and the banding on the tail is also typical of *babylonicus*. 04 January 2016. Greater Rann of Kachchh.

Vaibhav Mishra

130a,b. Juvenile *babylonicus*. This is a rather dark individual, showing almost blackish upperparts. The plumage looks much worn in early November, with the fringes almost non-existent. The underparts are rufous, showing somewhat heavier streaking. Note that thighs are finely streaked. The yellow cere and eye ring are seen here. The moustache looks entirely black, with the cheeks showing only a faint rufous tinge. This individual is very unlike the juvenile birds seen here, as the upperparts are darker than usual. 7 November 2009. Greater Rann of Kachchh.

John Holmes

131. Juvenile *babylonicus*. Note the streaking on the underparts, which is concentrated in the middle, leaving the upper breast and the lower belly and thighs largely unmarked. This type of streaked breast is typical of *babylonicus*. Note the rufous wash on the nape. May 2005. Near Urumqi, Xinjiang, China.



Falguna Shah

132. Juvenile female *babylonicus*. Dark brownish upperparts. Streaked underparts (forming lines) with prominent rufous wash. The upper breast has already moulted into adult like plumage. Thighs are finely streaked. The cere and eye ring are dark yellow. This is a juvenile which is in moult. This bird was seen in the area from December 2014 till February 2015. 1 February 2015, Little Rann of Kachchh.

Kiran Poonacha

133a,b. Juvenile *calidus*. This individual is similar to a juvenile *babylonicus*. The underparts are thinly streaked. However, note the fresh plumage (the fringes to the mantle feather are not at all worn) in late December, indicating late breeding. The face markings are poorly defined and the grey cere and eye ring, along with the bulkier build are indicative of a juvenile *calidus*. Dick Forsman helped us in identification of this bird and gave detailed explanation for the bird with emphasis on state of plumages in December. We consider this bird as a putative *calidus*. December 2012. Bangalore.

L: Prasad Gampule
R: Nirav Bhatt

134a (02 January 2011) & **134b** (16 December 2010): Juvenile *calidus*. A very different bird from those seen in Gujarat. Note the very sparsely streaked breast, with arrow-head markings on the flanks. The upperparts are greyer than brown – with a grey wash on the upperparts (which turned to pale brown later). Upperpart feathers with ochre fringes. The head markings are similar to *babylonicus*, with thin moustache and white supercilium. But note absence of any rufous on the head and underparts. Note also here the very fresh plumage with "scaly" effect due to wide pale fringing all over the upperparts. Such birds are said to inhabit the Russian Arctic, east up to the Taimyr Peninsula. This individual was very large in size (approaching a Saker Falcon *Falco cherrug*), and hence could be sexed as a female. It was seen in the same area for two months. Little Rann of Kachchh.

Dhairya Dixit

135a,b. Juvenile *calidus*. A pale individual with sparsely streaked breast. Note the head markings; white supercilium and forehead, thin moustache and hint of brownish wash on the moustache and eye line. The upperparts are light brownish and the plumage is looking very fresh, with no abrasion to the fringes of the mantle feathers. The underparts and cheeks are white, with no hint of rufous. 8 November 2015. Little Rann of Kachchh.

Saptagirish Oleti

136. Juvenile Peregrine Falcon. One of the most contentious individuals seen here. Expert opinion is divided regarding its identification. The slight rufous wash on the moustache and the head pattern points to a juvenile *babylonicus*. But note the sparsely streaked breast, which is similar to the bird in **134** the whitish colour to the underparts, the bulkier build, white supercilium, condition of the plumage, the arrow-head markings on the flanks, and the grey cere in late November, which indicates a *calidus*. This individual is probably a *calidus* (intergrade with a close clinal taxon?). However, such individuals are impossible to identify to the subspecies level with certainty unless trapped and measured, and hence are best left unidentified. 27 November 2010. Little Rann of Kachchh.

in figure 149 in White *et al.* (2013a); this individual was photographed in the Little Rann of Kachchh, and is given as a dark juvenile *babylonicus*. It is, in our opinion, most probably a juvenile *calidus*; the typical head pattern (lacking rufous wash on the moustache and cheeks), white base colour to underparts, the coarse streaking, arrowhead markings on the flanks, the greyish cere, and the rather bulky appearance point in that towards a *calidus*.

Discussion

Historically, *babylonicus* has been recorded in Gujarat; Ali (1954) collected two specimens from the northern edge of the Little Rann of Kachchh, and reported two more sightings from Kachchh. Dharmakumarsinhji (1955) noted that it was rare in Saurashtra, but seen more commonly than *peregrinator* in winter, when it preferred open country. This is not true now as *babylonicus* is no longer seen in Saurashtra and all recent records are from Kachchh. In fact, *peregrinator* breeds in the Girnar Hills near Junagadh in Saurashtra (Mori & Joshi 2017), and is more commonly seen in the surrounding areas now. Naoroji (2006) mentioned *babylonicus* as an uncommon winter visitor to north-western India, with a sight record from Kachchh.

Looking at the above records, it can be said that *babylonicus* is a rare, but regular, winter migrant to north-western India. It prefers desert and semi-desert areas, as the maximum number of records from Gujarat, are from desert areas of the Greater- and Little Rann of Kachchh. A few birds were seen in a specific area for more than two months in the Little Rann of Kachchh, indicating that they remain in the same area in the winter months. Interestingly, regarding the juvenile *babylonicus* which was seen during December 2014–February 2015 **[132]**, an adult *babylonicus* was also seen in the same area from December 2015 till February 2016. We feel that it could be the same individual owing to similar size and structural similarities in the two birds but, without ringing or other details, we cannot be sure. Also, both *calidus* and *babylonicus* occupy the same habitat in the Little Rann of Kachchh, and have been often sighted in the same location at different times (*pers. obs.*, NB).

F. pelegrinoides is not known to occur in India. Its distribution is from northern Africa, to the Middle East, and Arabia (Forsman 2016). It was seen in a study in the Middle East and Africa, that upperpart colour in *pelegrinoides* also ranged from light bluish to dark (blackish), similar to *babylonicus* (Corso 2001). It should be noted that some dark *babylonicus* seen here are extremely similar to *pelegrinoides*, and it is not possible to identify such individuals to the subspecific level. While *pelegrinoides* is known to be partially migratory (White *et al.* 2013a), only further research will confirm whether some birds seen here are indeed of this subspecies. This would require trapping, physical examination, and DNA analysis.

Ideally, a study of breeding birds is essential in proving the variation seen in *babylonicus*. The identification of juveniles should be researched in the areas where it is resident and/or moves only to the adjacent plains and valleys so that the breeding origin of these birds is known and details of plumage variation in adults and juveniles can be studied. The moult strategy in adults is also of interest as a few individuals seen here had started body moult (of mantle feathers) in late December and early January. The breeding origin of the birds wintering in India should also be studied by tagging the individuals. This will reveal where the birds wintering in India come from as it seems likely that birds from the entire breeding range of *babylonicus* winter here. This will also help in understanding the movements and migration routes of these birds.

As *babylonicus* is rare in India and very few individuals are photographed and even lesser number of individuals studied for a longer period of time in the winter, there is very less data regarding the variation and identification of juvenile *babylonicus* in the reference texts. The identification pointers presented here are based on a preliminary study and mainly intended to help birdwatchers distinguish *babylonicus* from the more common *calidus* during their winter migration to India. However, in juvenile plumage, unless the bird exhibits typical plumage characteristics of either *babylonicus* or *calidus*, it is best to abstain from subspecific identification. Further research will help clarify taxonomical and morphological differences in this taxon, along with its habitat preferences in the winter.

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Birds of the Indian Subcontinent: Species not recorded from India

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137. Abbott's Booby. Photo: Charles Anderson

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The Indian Subcontinent, comprising seven countries, namely, India, Pakistan, Nepal, Bhutan, Bangladesh, Sri Lanka, and the Maldives, is often recognised as a distinct biogeographic unit (e.g., Karanth 2003). A definitive checklist for India was recently published (Praveen *et al.* 2016a), with subsequent periodic online updates (www.indianbirds.in/india/). Since a majority of the past and current reference works on the region's avifauna invariably covered the entire subcontinent (Ripley 1961; Ali & Ripley 1987; Grimmett *et al.* 1998, 2011; Kazmierczak 2000, Manakadan & Pittie 2001, 2002), a strong need was felt to extend the checklist to the Indian Subcontinent, using the same methodological rigour and principles applied for the India Checklist. Naturally, this extended Indian Subcontinent Checklist includes *all* the 1271 species from the India Checklist (Praveen *et al.* 2016b), and species that have been reliably, and conclusively, recorded from within the boundaries of the Indian Subcontinent, but from outside India. The latter comprises 69 species that include those with geographically restricted ranges as well as rarities for the region (*see* Appendix). For matters of taxonomy, species inclusion, and English name conventions, we follow Praveen *et al.* (2016a); notably we follow 'Howard and Moore 4th edition' Dickinson & Remsen (2013), and Dickinson & Christidis (2014) for taxonomic matters. The maritime limit of the Indian Subcontinent is set by the cumulative limit of the maritime boundaries of member countries as defined in Praveen *et al.* (2016a). Species resident in the region are marked with a dagger (†) sign. Species endemic to the respective countries are marked with a double dagger (††) sign. While there are no birds endemic to Pakistan, Bhutan, Bangladesh, or the Maldives, 25 species are endemic to Sri Lanka, and one to Nepal. However, nine species that are resident in Pakistan, and two in Bangladesh do not figure in the India Checklist. Both Nepal and Sri Lanka have a bird records committee and hence we use the decisions made by them for species inclusion for those countries.

Unlike the India Checklist, we do not intend to publish the full Indian Subcontinent Checklist in print. However, the consolidated list of 1340 species, in the standard taxonomic order, with notes and alternative names will be available for download from the *Indian BIRDS* website. This note also provides one (or two) recent reference/s that review/s the species status in the respective country. We also provide detailed annotations for some select rarities for the Indian Subcontinent. Inclusion of endemic, and other geographically limited taxa on the Indian Subcontinent checklist is clear, and does not need further discussion.

Selected species accounts

Egyptian Nightjar *Caprimulgus aegyptius*

Included in Hbk based on a record from Balochistan. BSA2 included it only for south-western Afghanistan and considered its presence in Chagai, Pakistan, as possible since it has been collected nearby, on the Iran–Afghanistan border. It is suspected that this record in BSA2 refers to an untraced specimen, and another seen on 12 April 1926 (or 1927) by Major General A. P. F. Christison at a location known as Robat on the Afghan–Iran–Balochistan frontier (Christison & Ticehurst 1942). It should be remarked that Christison clearly stated in the note that his records were from the district of Chagai and five other districts of British

Table 1. Abbreviations used in the text

Acronym	Reference
BLI	BirdLife International (2017)
BNHS	Bombay Natural History Society
BSA	Rasmussen & Anderton (2005)
BSA2	Rasmussen & Anderton (2012)
eBird	Clements *et al.* (2016)
Hbk	Ali & Ripley (2001)
IOC	International Ornithological Committee (Gill & Donsker 2017)
NHM/NHMUK	Natural History Museum, London (www.nhm.ac.uk/)
ROM	Royal Ontario Museum
UMMZ	University of Michigan–Museum of Zoology (http://www.lsa.umich.edu/ummz/)

Balochistan, and does not mention any Iranian sites. Abdulali & Hussain (1972) commented on the location that this site, referred to as "Rabat Thana" (meaning Rabat Inn) by them, is in Pakistani Balochistan as per the 1931 Imperial Gazetteer of India. We reconfirmed that Killa Robat] (not Rabat Thana) is indeed mapped in this reference under Pakistani Balochistan (http://dsal.uchicago.edu/reference/gaz_atlas_1931/pager.php?object=44) and as do several historical texts (http://www.gutenberg.org/files/22117/22117-h/v2.html#Pg_2-277), and must be the present day town of Ribāt Qila (29.816838°N, 60.920917°E) in Pakistani Balochistan. The specimen was apparently examined by C. B. Ticehurst (Abdulali & Hussain 1972), and hence, considered a valid record for the Indian Subcontinent.

Pallid Swift *Apus pallidus*

Both Hbk and BSA2 included it based on records from Pakistan; BSA2 additionally mentioned records from the Maldives and a possible photograph from south-eastern Sri Lanka. The records from Pakistan are the two specimens in Hume's Collection in NHM (NHMUK 1887.8.1.117–118) from Karachi [=Kurrachee] (25.01ºN, 67.06ºE) while Hume apparently had specimens from Makran [=Mekran Coast] as well (Hume 1879). Baker (1927) commented that the swifts that Butler saw over Hyderabad (25.36ºN, 68.36ºE), Pakistan, could have been this species. Interestingly, none of Butler's writings referred to this species though he reported several Alpine Swifts *Tachymarptis melba* from Hyderabad, Pakistan (Butler 1878). In the Maldives, Strickland & Jenner (1978) recorded it at Addu Atoll (0.64ºS, 73.12ºE) on 03 October 1970, and another one, well examined in the hand, on 20 September 1975. Anderson (2007) reported one seen at close range from North Malé Atoll, the Maldives, on 07 January 1999; however, the observer indicated that he did not eliminate the *pekinensis* race of Common Swift *A. apus* (Justin Jansen, *in litt*., e-mail to RCA dated 24 July 2017). Though the 1975 specimen from Addu Atoll was confidently identified at that time as this species, the details of identification are not accessible now. The photograph referred to by BSA2 from Sri Lanka could not be traced now but this has not been a formal submission to the Ceylon Bird Club Rarities & Records Committee. When it was discussed, where DW was a part of the discussion, it related to a blurred photograph of a large swift, which the observer thought, could have been a Common Swift or this species. We include this species for the Indian Subcontinent based on the validated specimens from Pakistan.

Band-rumped Storm-petrel *Hydrobates castro*

BSA2 includes it based on a sight record off the Maldives (Anderson 2007; see box). We include this species based on this well-described sight record. However, it must be mentioned that the taxonomy of Band-rumped Storm-petrel is in flux with multiple potential species involved, of which at least one split (Monteiro's Storm-Petrel *H. monteiroi*) has been recognised by Dickinson & Remsen (2013). At sea (in its pelagic environment), i.e., when not on its breeding grounds, or in hand, its identification is not worked out properly (Howell *et al.* 2010); however it is believed that Monteiro's Storm-petrel may remain near its breeding grounds in the Azores throughout the year (Bolton *et al.* 2008). Vagrant sight records like this, of Band-rumped Storm-petrel, would be difficult to assess in the future if more populations gain full species status.

Band-rumped Storm-petrel, *Hydrobates castro, east of North Malé Atoll (04.30°N, 73.62°E), the Maldives on 09 November 2004*

From notes made on 09 November 2004:
Location: At sea off North Malé Atoll. The bird crossed our bows, and gave very good views to about 10–15 m. The sea was calm with little or no wind.
General: Estimated to be a medium- to large-sized Storm-petrel (c. 20 cm), with a white rump patch and pale upperwing band. Otherwise, plumage all blackish-brown.
Shape and plumage: Legs definitely did not project beyond slightly forked tail. Wings rather long, but tips seemed rounded, and held with slight bend, appearing to be about 2/3 open most of the time. The bird was in moult (one primary still growing, probably the fourth or fifth feather, counting from the outside). Plumage appeared generally sooty or dark brown, except for slightly pale upperwing primary coverts, rather striking broad pale buff diagonal carpal/secondary covert band, and conspicuous white rump patch (round and extensive, extending laterally, and without any dark marks on rear edge). Underwing not seen. Flight with slow wing beats and short glides (in almost windless conditions).
Identification: Compared with Leach's Storm-petrel, *H. leucorhous*, this bird had proportionately shorter, broader wings and a relatively short and evenly wide tail (not tapering when folded), which showed inconspicuous forking. Also, its white rump patch was typical for *H. castro*, being large and round- or oval-shaped, extending well onto the sides, and not showing any hint of a central stripe. Compared with Wilson's Storm-petrel, *Oceanites oceanicus*, this bird appeared larger than that distinctly smaller species, and the feet did not project beyond the tail. In addition, this bird seemed browner and its rump patch was both broader and more extensive on the sides. — Hadoram Shirihai & R. Charles Anderson

Sooty Shearwater *Ardenna grisea*

Considered hypothetical in BSA2, which Praveen *et al*. (2013) affirmed, based on sight records that lacked sufficient details. However, there are three well-described April records from the Maldives (Anderson *et al*. 2016), and we include this species based on these records.

Abbott's Booby *Papasula abbotti*

Though considered hypothetical in BSA2, a single bird was photographed by RCA on 06 October 2014 in the Veimandhoo Channel, between Thaa and Laamu Atolls (02.17°N, 73.32°E), the Maldives (Anderson *et al*. 2016). We include this species based on this photographic record **[137]**.

Eurasian Dotterel *Eudromias morinellus*

Not included in Hbk, but included in BSA2 based on a report from Pakistan. This refers to a single bird, in winter plumage, photographed in January 1991 by Rolf Passburg in Hub [=Hab] Valley (25.34ºN, 67.13ºE) along the border between Sindh and Balochistan, in an arid mountainous region with savannah vegetation and a large dam-reservoir (Roberts 2002). The photograph, though not published, was widely exhibited in November 1991, and was examined by TI. Roberts intended to archive it in the 'Picture Library of the BNHS' (Roberts 2002:

323), but unfortunately it is not in the BNHS image repository now (Nirmala Barure, in litt., e-mail to PJ, dated 11 September 2014). We include this species based on this photographic record.

Grey-tailed Tattler *Tringa brevipes*

Not included in Hbk; BSA2 included it based on well-documented spring migration sight records in Bangladesh by multiple observers. All Bangladesh records are from Patenga, near Chittagong, in late April and early May (Thompson *et al.* 1994; Thompson & Johnson 2003). Details of the first sighting are as follows: '18 May 89, Patenga. Two with yellowish legs, plain grey back, white belly, scaled neck and chest and sides, white eye line, long straight dark bill, no white in wings, plain med [=medium] grey tail, flushed 3 times to check wing and tail but all grey with pailer (sic) tail and rump. Plover size, call is a double noted thing with the end of each uprising," (David Johnson in an unpublished note on "New bird records for Bangladesh", which was incorporated into Thompson *et al*. 1994).

Nordmann's Greenshank *Tringa guttifer*

Sayam U. Chowdhury

138. Nordmann's Greenshank.

Hbk included it based on reports from Assam and Bangladesh, while BSA2 included it based on a single Bangladesh sight record by J. R. Howes. Since then, multiple records have been documented (Thompson *et al.* 1994, Thompson & Johnson 2003), and photographed (Bird *et al.* 2010, Rahmani 2012, Thompson *et al.* 2014) **[138]** from Bangladesh. These indicate that it is a regular winter migrant, in small numbers, to that country. A photographic claim from Sri Lanka was later identified as a Common Greenshank *T. nebularia* (DW), and another, sight record (Robson 1991, De Silva 1992), was also not accepted by CBRC (Editor 1993; Hoffmann 1996), which concluded, after protracted discussions, that it was a Common Greenshank (DW). There was an unconfirmed report from Nepal (del-Nevo 1984), which is not considered definite here. In summary, the species is included in the Indian Subcontinent list based on the well-documented reports from Bangladesh.

Snowy Owl *Bubo scandiacus*

Hbk and BSA2 included this species based on a single nineteenth century specimen from Pakistan: Hume received a specimen (NHMUK # 1886.2.1.452), from Mardan [=Murdan] (34.23ºN, 72.08ºE), Pakistan, as collected on 03 March 1871 (not 1876 as reported in Ali & Ripley 1987: 250). Other individuals of the Snowy Owl—a species noted for its sudden eruptions in population—were also reported by shikaris during that period (Blanford 1895: 290). The original label on the Snowy Owl specimen in NHM carries an illegible name, probably a shikari, but the collector's name is given as J. U. Johnson ('Dr. Johnson' in Blanford 1895: 290), who might have given it to Hume (Robert Prŷs-Jones, in litt., e-mail to PJ dated 21 February 2017).

Sooty Falcon *Falco concolor*

Though stated as occurring on the western Makran Coast of south-western Pakistan by Hbk and BSA, the latter work considered it hypothetical for South Asia as definite evidence could not be traced. Ticehurst (1927) included it in the avifauna of Balochistan, based on a specimen collected by W. D. Cumming on 31 August 1912 at Chabahar [=Charbar] (25.28°N, 60.63°E), Sistan & Baluchestan, Iran [*not Pakistan*]. At NHM, N.B. Kinnear compared it with Madagascar specimens, and found that it was a very pale bird. Cumming mentioned two other records, one was seen along with the former, while another two were recovered alive after a cyclone on 04 May 1901—all four birds were presumed to be Amur Falcons *F. amurensis* until the identity of the only specimen collected was corrected by Ticehurst to Sooty. The other three birds were, perhaps, also Sooty, but this could not be confirmed. Apparently, that skin, which finally landed in Quetta Museum, was lost in the Quetta earthquake of 1935 (Hbk) and so, is no longer available for examination (BSA2). As per Roberts (1991), three specimens had been collected at the end August, and in early May, at the mouth of the Hingol River. Some of these specimens were probably the same ones that BSA2 stated as not being located in BNHS or NHM (Robert Prŷs-Jones, *in litt.,* e-mail to PJ dated 15 July 2015). Roberts (1991), Ferguson-Lees & Christie (2001), Grimmett *et al.* (2008), and Naoroji (2006) considered this species as a breeding visitor to this region, particularly Ormara (25.27°N, 64.58°E) westwards and in Hingol National Park (25.51°N, 65.52°E). Naoroji (2006: 580–581) cites T. J. Roberts (*in litt.*), who stated that, 'Birds carrying prey, presumably males, were observed along oriented flight paths into the hills…considerably east of Ormara.' The Eastern Sham Valley/ Machi Nulla area (25.45°N, 65.53°E) is a hilly area and is the only habitat considered suitable for Sooty Falcon in the Hingol National Park with 16 birds recorded there in 2004 (Ghalib *et al.* 2008). BSA2 resurrected it to the list citing recent records (Khan *et al.* 2010) from Hingol River (Rasmussen 2013), and hence we include it in the Indian Subcontinent checklist.

Afghan Sparrow *Passer yatii*

Hbk and BSA2 included it as a winter visitor to the Chagai Desert in Pakistan, based on sight records by Christison, who considered it to be a common winter visitor in central Chagai (Christison 1941). Though no specimen has been traced till date, others (e.g., Roberts 1991) have accepted this record, and the species is regularly reported from adjoining Afghanistan (BSA2). Hence, we include the species in the Indian Subcontinent list based on Christison's sight records.

Three-banded Rosefinch *Carpodacus trifasciatus*

Hbk included this species as possible in Arunachal Pradesh as it's a winter visitor to south-eastern Tibet. BSA2 treated the only sight record from the region as hypothetical. This refers to a record of two females, and one male, from Jakar (27.55°N, 90.73°E), eastern Bhutan, on 13 March 1986 (Clements 1992). A detailed description of birds, observed for five minutes, from a distance of just 30 m, eliminates all potential confusion species and we accept this species in the subcontinent list based on this sight record.

Lapland Longspur *Calcarius lapponicus*

Not included in Hbk or BSA2 but on 21 February 2014, a single bird, possibly a male, was photographed in Bhutan (Chophel & Sherub 2016). We include this species in the Indian Subcontinent list based on this photographic record.

Rustic Bunting *Schoeniclus rusticus*

Not included in Hbk but included as hypothetical in BSA2. The only published report from the Indian Subcontinent was of a single bird reported from Nepal (del-Nevo & Ewins 1984); this was subsequently challenged by Gauntlett (1986) as the authors had not considered Tristram's Bunting *S. tristrami*, which was more likely to occur there, and which has been subsequently documented from north-eastern India (Naniwadekar *et al.* 2013; Thangaraj & Mani 2016). On 31 January 1981, del-Nevo & Ewins (1984) observed a male along with a flock of Little Buntings *S. pusillus* for a period of 40 min and from distances as close as 20 m, at Sauraha (27.58°N, 84.49°E), Royal Chitwan National Park, Nepal. The field description provided is considered to eliminate Tristram's Bunting; 'the tufted crest' noted by the observers when the bird was alarmed, being a reliable distinguishing feature from both, Little (which observers eliminated), and Tristram's Buntings. Additionally, the chestnut-tinged nape patch described by the observers is absent in Tristram's. The Nepal Rare Birds Committee (*henceforth*, NRBC) has also accepted this record. The notes from the second record, which were not published, but were accepted by NRBC, are given below. Though the observer did not consider Tristram's Bunting then, the crested appearance, as noted, is sufficient to eliminate that species. We accept this species into the Indian Subcontinental list based on these two Nepal sight records.

Rustic Bunting *Schoeniclus rusticus*, Kagbeni (28.97°N, 82.76°E), Mustang District, Nepal on 25 February 1981

I was walking up through the terraced fields at the back of Kagbeni when I flushed a flock of around 50 Pine Buntings *Emberiza leucocephalos* from the terrace above me. I stopped at a point where my chest was on a level with the terrace and looked around for any buntings still present. On the line of the terrace some 50 yards away a bunting was crouching on the ground. It walked forward into the open and gave brief views before flying up and away to join Pine Buntings already perched in some distant bushes. Despite subsequent searching the bird was not re-found.

Size and shape: A compact bunting with a rather large head and a crested appearance due to partially erect rear crown feathers. Shorter than Pine Bunting, largely due to its shorter tail.

Upperparts: Head very bright chestnut, recalling Little Bunting *S. pusillus*, with obscure whitish supercilium and moustache. Crown darker. Rest of upperparts brown, heavily streaked darker. Tail dark with white outer tail feathers.

Underparts: Very clean whitish with 'messy' maroon patches and odd spots (rather than streaks) on the breast.

The bird did not call. My immediate impression was of Rustic Bunting from pictures I had seen of the species and this identification was confirmed upon examination of the literature on my return to Britain. There are no similar species with which it could be confused other than those with which I am familiar.

— **Tony Baker,** E-mail: tony.baker@rspb.org.uk

Radde's Warbler *Phylloscopus schwarzi*

Not included in Hbk and treated as hypothetical by BSA2 as there were only sight records. There are three sight records from Bangladesh: three individuals seen in December 1986 at Gulshan, Dhaka, by Bill Harvey; two on 20 December 1988 in the National Botanical Gardens, Dhaka, by Bill Harvey; and one in a mangrove forest in the Sundarbans on 24 February 1992 by David Johnson (Thompson *et al.* 1994). It has been added as a winter vagrant to the Bangladesh list (Thompson & Johnson 1996: 11, 49), based on these records. According to Bill Harvey, the birds at Gulshan were feeding in a large clump of bougainvillea in his garden during 15–20 December 1986 and he was able to observe the birds at close quarters from the sitting room. The main confusion species in Bangladesh is the Dusky Warbler *P. fuscatus*, from which it was eliminated primarily by its stubby bill (Bill Harvey, *in litt*., e-mail to PJ dated 26 February 2017). The details of the botanical garden record are not available, though Bill is confident of the ID (Bill Harvey, *in litt*., e-mail to PJ dated 26 February 2017). The original outline, by David Johnson, for a paper on "new bird records for Bangladesh", which ultimately was authored by Thompson *et al.* (1994), stated for this species, '24 Feb 92 one in forest near Tiger Point [in Sundarbans], warm brown under, very distinctive, call similar to Dusky. Just like the picture in Inskips (sic).' David lived in Bangladesh for over 20 years and was very familiar with the Dusky Warbler, which is a common winter visitor. But the similarity of its call, to that of a Dusky, is problematic, and David could not recall that sighting recently (David Johnson, *in litt*., e-mail to PMT dated 29 March 2017). Meanwhile, there are three unpublished records from Nepal, accepted by the NRBC (Inskipp & Inskipp 1991) and full descriptions of two of these are furnished here below; the details of the third record appear to have been lost. The species is accepted into the Indian Subcontinental list based on the two detailed notes of the sight records from Nepal, and multiple individuals recorded in Bangladesh in 1986 for which the context is available.

Radde's Warbler near Charali (26.65°N, 83.04°E), Eastern Nepal on 25 December 1979

Details in my notebook are distressingly brief. With minimal padding:

"The bird was clearly a larger phyllosc being similar to a Dusky Warbler but with a thicker paler bill and stronger fleshy legs. Its most obvious feature was a very prominent creamy supercilium, bordered above and below by a black line, most obvious through and behind the eye. The supercilium had two kinks in it, as if there wasn't room on the head for it if it was straight, and it flared behind eye and was upturned at its end. The underparts were a more or less uniform warm buff and the upperparts brownish, tinged green, especially on the wings. It called, but not continually, a not particularly loud, somewhat nasal 'stup'."

This bird was seen while walking out from Ilam to the main road as the result of a bus strike. I obtained good views of what was obviously a non-wing-barred phyllosc feeding in low vegetation on/near the ground (my notes indicate I had already seen single Dusky- *P. fuscatus* and Tickell's Leaf Warblers *P. affinis* that morning). It was quickly (and confidently!) identified as a Radde's Warbler based on its call (which I find quite different from Dusky), strong bill and legs, very prominent creamy supercilium, buffy underparts and

contrasting brownish-green upperparts. I cannot now recall how long I watched it for but suspect it was 5-10 minutes.

I was aware that this was likely to be a good record, as the species was not included in Fleming, although I recalled a conversation I'd had with Dick Byrne on Shetland in 1976, which greatly impressed me when he mentioned that he'd seen a Radde's Warbler at the Taj Mahal (amongst other things) in a previous winter.

At the time of the sighting I had previously seen seven Radde's (six in Thailand in January 1979, and one on St Agnes that October), and 60 Dusky (St Agnes in Oct 76, Sandwich Bay in Nov 78, 27 in Thailand in Dec 78/Jan 79, and 31 in Nepal in Nov/Dec 79).

On returning to the UK a couple of weeks later I wrote to Bob Fleming by air letter sending details of the sighting (including if I recall a crude sketch). Unfortunately I did not keep a copy of this, which would have added more flesh to the account than I am now able to recall and probably filled in some of the gaps in my notes. I remember receiving a nice reply along the lines that it was an interesting record but that he felt unable to accept as a first a sight record of such a difficult species. While this was a bit disappointing it was understandable and it didn't reduce my confidence in the record, which remains to this day. Equally if it's not found to be acceptable now for a first I can quite easily understand. My main disappointment is that my notes and memory may not do the bird the justice it perhaps deserves.

— **Richard Fairbank,** West Sussex. E-mail: R.J.Fairbank@sussex.ac.uk

Radde's Warbler *Phylloscopus schwarzi*, Pokhara (28.21°N, 83.93°E), Nepal on 4-5 March 1983

The bird was first seen in a hotel garden at Phewa Tal, Pokhara, foraging amongst low ('4 feet' high) fruit bushes, normally on the ground amongst dry grass and bare ground. It was seen again the following day some 50 m outside the garden in scrubby vegetation. The bird bore a close resemblance both in appearance and calls to those seen three weeks previously in Khao Yai National Park, Thailand. I was aware at the time of the rare status of the species in Nepal and so made a conscious effort to eliminate other similar species. Its characteristics did not suggest any of the bush warblers *(Cettia, Horornis)* although the available field guide (Fleming *et al.* 1976) was of little assistance. Dusky Warblers *P. fuscatus* were seen daily in the area at the time, and had been seen commonly in Thailand. Thus I was able to dismiss that species with confidence. The following description is based on notes made at the time.

Jizz typical of *Phylloscopus* but tail broad-tipped and slightly rounded. Head rather small and rounded. It was confiding and habitually flicked its tail and wings – features typical of the Radde's Warblers seen in Thailand. Upperparts cold grey-brown. Tail browner. Fawn ear-coverts and moustachial stripe, bordered darker. Dark malar mark. Supercilium quite long and curled up slightly at the rear; prominent and buffy; narrow and bordered below by a black eyestripe and above by a dark line. Throat whitish, contrasting with ashy-grey flanks and breast. Undertail-coverts, vent and sides to vent apricot-buff. Buffish flanks lightly streaked. Bill rather fine (i.e. not as deep as typically described for Radde's Warbler) with yellowish base. Call a hard, quite rapid *stuck stuck* etc.

– **Tony Baker,** Email: tony.baker@rspb.org.uk

Ménétries's Warbler *Curruca mystacea*

Included in Hbk and BSA2 based on recent records from Balochistan, with additional status information from Afghanistan, documented in BSA2. The first subcontinental record was reported from the Surkhab Valley (30.55°N, 67.20°E), Pakistan, by T. J. Roberts in March 1974 (Roberts 1975), and subsequently he found several pairs breeding there (Roberts 1980). We include this species based on these well-substantiated records from Pakistan.

European Robin *Erithacus rubecula*

Hbk did not include this species while BSA2 mentioned recent records from Pakistan. Included here on the strength of a photograph taken on 13 February 2000, by Major Erkki Kallio, at the foot of the Margalla Hills (33.74°N, 73.03°E), Islamabad, Pakistan; this was examined by T. J. Roberts (Roberts 2002). There is another sight record on 28 December, in the same year, by Juha Kylänpää in the Kao forest (34.05°N, 73.41°E), below Dunga Gali, Hazara District, Pakistan (Roberts 2002). We include it in the Indian Subcontinent list based on the validated photograph from Pakistan.

Common Nightingale *Luscinia megarhynchos*

Based on records of the race *golzii* (= *hafizi* in Hbk) from south-western Balochistan and Quetta, the Hbk includes it as an occasional winter visitor while BSA2 treats it as a passage migrant. A. F. P. Christison obtained specimens in Kacha (29.49ºN, 61.25ºE), and Ribāt Qila [=Robat], on the Iranian frontier, in April 1939 (Christison & Ticehurst 1942). Two specimens were obtained from Quetta on 30 April 1909, and in October 1913 (Ticehurst 1926), but they were suspected to be escapees as the species was a popular cage bird. All these specimens remain untraced. A third, Meinertzhagen specimen (NHMUK #1965.M.10871), collected on 02 February 1914 in Quetta, also exists (Ticehurst 1926), but this '*almost certainly a Severtzoff specimen that has been heavily remade*' as per the analysis done by Pamela Rasmussen and Robert Prŷs-Jones (Robert Prŷs-Jones, *in litt.,* e-mail to PJ dated 21 February 2017). It possibly originated in the Turkestan region of central Asia. We include the species here based on the Pakistan specimens. It occurs as a summer visitor to northern Afghanistan and it is very likely that the April birds were on passage.

Redwing *Turdus iliacus*

Hbk included it based on records from Khyber Pakhtunkhwa, Pakistan. Jerdon (1862) stated that it occurred in north-west Himalayas, citing a communication from Edward Blyth that a certain Lieutenant Trotter observed it as a winter visitor to Kohat (33.57ºN, 71.35ºE) in large numbers. However, subsequent observers including McGrath and Whitehead did not come across this species there despite active searches (Whitehead 1911) and the report was later rejected as a misidentification by Ticehurst (1939). Captain Perreau mentioned that he almost certainly saw one at Drosh (35.57ºN, 71.77ºE) in February 1903 (Perreau 1910), where F. Wall shot one on 23 March 1912 (or 1911) amongst many he saw there during February-March (Wall 1912) but this specimen remains untraceable. However, on 13 February 1989, the remnants of a specimen were collected by Juha Kylänpää from a garden at Tank [=Tonk] (32.21ºN, 70.36ºE), Dera Ismail Khan, Khyber-Pakhtunkhwa (Kylänpää 2000) - the same province as the previous reports. A wing was sent to Helsinki University Zoological Museum, Finland where it was reportedly

confirmed as this species (Roberts 2002). Another wing was sent to T.J. Roberts who deposited the same in the BNHS (Kylänpää 2000, Roberts 2002, BNHS #26782, Rahul Khot, in email dated 8 May 2016). We include this species in the checklist based on this specimen examined in hand.

Naumann's Thrush *Turdus naumanni*

Not included in Hbk or BSA2 but several recent sight, and photographic, records from eastern Himalayas, of hybrids with Dusky Thrush *T. eunomus*, with one pure form reported from Thrumsingla National Park, Bhutan, on 25 and 27 February 2017 by Peter Clement and others (Dalvi *et al.* 2017). We include this species in the Indian Subcontinent list based on this well-described sight record.

Notes on alternate taxonomic treatment

Praveen *et al*. (2016a) covered alternate taxonomic treatment for all species found in India, which remains valid in the context of the Indian Subcontinent, apart from the following additions.

Bubulcus ibis: Includes here *ibis sensu stricto* ('Western Cattle Egret') recorded from Pakistan (UMMZ #76210-13), which is sometimes treated as an independent species (BSA2, IOC).

Treron pompadora: Includes here *pompadora sensu stricto* ('Sri Lanka/Ceylon Green Pigeon') a Sri Lanka endemic taxon, which is sometimes treated as an independent species (BSA2, BLI, eBird, IOC).

Burhinus oedicnemus: Includes here *harterti*, recorded from Pakistan (Abdulali 1970), which is sometimes treated as an independent species under *oedicnemus sensu stricto* ('Eurasian Thick-knee/Eurasian Stone-curlew') (BSA2, BLI, eBird, IOC).

Chrysocolaptes lucidus: Includes here *stricklandi* ('Sri Lanka Greater Flameback/Crimson-backed Flameback') a Sri Lanka endemic taxon, which is sometimes treated as separate from extralimital *lucidus* ('Buff-spotted Flameback') (BSA2, BLI, eBird, IOC).

Dinopium benghalense: Includes here *psarodes* ('Lesser Sri Lanka/Red-backed Flameback') a Sri Lanka endemic taxon, which is sometimes treated as separate from *benghalense* (BLI, IOC).

Tephrodornis pondicerianus: Includes here *affinis* ('Sri Lanka/ Ceylon Woodshrike') a Sri Lanka endemic taxon, which is sometimes treated as separate from *pondicerianus* (BSA2, BLI, eBird, IOC).

Dicrurus paradiseus: Includes here *lophorinus* ('Sri Lanka/Sri Lanka Crested/Ceylon Crested Drongo') a Sri Lanka endemic taxon, which is sometimes treated as separate from *paradiseus* (BSA2, BLI, eBird, IOC).

Cecropis daurica: Includes here *hyperythra* ('Sri Lanka/Ceylon Swallow') a Sri Lanka endemic taxon, which is sometimes treated as separate from *daurica* (BSA2, BLI, eBird, IOC).

Pycnonotus melanicterus: Includes here *melanicterus sensu stricto* ('Black-capped Bulbul') a Sri Lanka endemic taxon, which is sometimes treated as an independent species (BSA2, BLI, eBird, IOC).

Argya caudata: Includes here *huttoni* ('Afghan Babbler') a breeding taxon of Balochistan, Pakistan (Roberts 1986), which is sometimes treated as separate from *caudata* (BSA2, eBird, IOC).

Pomatorhinus horsfieldii: Includes here *melanurus* (along with *holdsworthi*) ('Sri Lankan/Sri Lanka Scimitar Babbler) a Sri Lanka endemic taxon, which is sometimes treated as separate from *horsfieldii* (BLI, eBird, IOC).

Zoothera dauma: Includes here *imbricata* ('Ceylon Scaly/Sri Lanka Thrush') a Sri Lanka endemic taxon, which is sometimes treated as separate from *dauma* (BSA2, eBird, IOC) or as subspecies of *Z. aurea* ('White's Thrush') (BLI).

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Appendix. Summary of bird species added to the Indian Subcontinental list over the species in India checklist († Resident, †† Country endemic)

No	Family	Bird species	PAK	NEP	BHU	BAN	SLK	MAL	Remarks
1	Phasianidae	See-see Partridge *Ammoperdix griseogularis*†	✔						Abdulali (1969); Khaliq *et al.* (2010)
2	Phasianidae	Sri Lanka Junglefowl *Gallus lafayettii*††					✔		
3	Phasianidae	Sri Lanka Spurfowl *Galloperdix bicalcarata*††					✔		
4	Columbidae	Sri Lanka Wood Pigeon *Columba torringtoniae*††					✔		
5	Pteroclidae	Crowned Sandgrouse *Pterocles coronatus*†	✔						Ticehurst (1927)
6	Pteroclidae	Lichtenstein's Sandgrouse *Pterocles lichtensteinii*†	✔						Abdulali (1971)
7	Caprimulgidae	Egyptian Nightjar *Caprimulgus aegyptius*	✔						Christison & Ticehurst (1942). See notes.
8	Apodidae	Pallid Swift *Apus pallidus*	✔						NHMUK 1887.8.1.117-118. See notes.
9	Cuculidae	Green-billed Coucal *Centropus chlororhynchos*††					✔		
10	Cuculidae	Red-faced Malkoha *Phaenicophaeus pyrrhocephalus*††					✔		
11	Otididae	Great Bustard *Otis tarda*	✔						Roberts (1991); BirdLife International (2001)
12	Hydrobatidae	Band-rumped Storm-petrel *Hydrobates castro*						✔	Anderson (2007); Praveen *et al.* (2013). See notes.
13	Procellariidae	Sooty Shearwater *Ardenna grisea*						✔	Anderson et al. (2016). See notes.
14	Procellariidae	Bulwer's Petrel *Bulweria bulwerii*						✔	Phillips (1959); Praveen *et al.* (2013)
15	Sulidae	Abbott's Booby *Papasula abbotti*						✔	Anderson *et al.* (2016). See notes.
16	Phalacrocoracidae	Pygmy Cormorant *Microcarbo pygmaeus*	✔						Abdulali & Pereira (1966); Praveen *et al.* (2014)
17	Charadriidae	Eurasian Dotterel *Eudromias morinellus*	✔						Roberts (2002). See notes.
18	Scolopacidae	Grey-tailed Tattler *Tringa brevipes*				✔			Thompson & Johnson (2003). See notes.
19	Scolopacidae	Nordmann's Greenshank *Tringa guttifer*				✔			Thompson *et al.* (1994); Bird *et al.* (2010). See notes.
20	Strigidae	Chestnut-backed Owlet *Glaucidium castanotum*††					✔		
21	Strigidae	Serendib Scops Owl *Otus thilohoffmanni*††					✔		
22	Strigidae	Snowy Owl *Bubo scandiacus*	✔						Hume (1871). See notes.
23	Bucerotidae	Sri Lanka Grey Hornbill *Ocyceros gingalensis*††					✔		
24	Picidae	Streak-breasted Woodpecker *Picus viridanus*†				✔			Rasmussen (2000); Khan (2005); Thompson *et al.* (2014)

Appendix. Summary of bird species added to the Indian Subcontinental list over the species in India checklist († Resident, †† Country endemic)

No	Family	Bird species	PAK	NEP	BHU	BAN	SLK	MAL	Remarks
25	Ramphastidae	Yellow-fronted Barbet *Psilopogon flavifrons*††					✔		
26	Ramphastidae	Sri Lanka Small Barbet *Psilopogon rubricapillus*††					✔		
27	Falconidae	Sooty Falcon *Falco concolor*†	✔						Ghalib *et al.* (2008). See notes.
28	Psittaculidae	Layard's Parakeet *Psittacula calthrapae*††					✔		
29	Psittaculidae	Sri Lanka Hanging Parrot *Loriculus beryllinus*††					✔		
30	Corvidae	Sri Lanka Blue Magpie *Urocissa ornata*††					✔		
31	Corvidae	Brown-necked Raven *Corvus ruficollis*†	✔						Abdulali (1980)
32	Dicaeidae	Legge's Flowerpecker *Dicaeum vincens*††					✔		
33	Dicaeidae	Orange-bellied Flowerpecker *Dicaeum trigonostigma*†				✔			Paynter (1970)
34	Prunellidae	Radde's Accentor *Prunella ocularis*	✔						Roberts (1992)
35	Motacillidae	Meadow Pipit *Anthus pratensis*	✔						Rasmussen *et al.* (2017)
36	Passeridae	Afghan Sparrow *Passer yatii*	✔						Christison (1941). See notes.
37	Fringillidae	Three-banded Rosefinch *Carpodacus trifasciatus*			✔				Clements (1992). See notes.
38	Fringillidae	Crimson-winged Finch *Rhodopechys sanguineus*	✔						Fulton (1904); Unnithan (2005)
39	Fringillidae	Desert Finch *Rhodospiza obsoleta*	✔						Unnithan (2005); Roberts (2007)
40	Plectrophenacidae	Lapland Longspur *Calcarius lapponicus*			✔				Chophel & Sherub (2016). See notes.
41	Emberizidae	Corn Bunting *Emberiza calandra*	✔						Whistler (1918)
42	Emberizidae	Rustic Bunting *Schoeniclus rusticus*		✔					del-Nevo & Ewins (1984). See notes.
43	Alaudidae	Bar-tailed Lark *Ammomanes cinctura*†	✔						Christison (1941)
44	Panuridae	Bearded Reedling *Panurus biarmicus*	✔						Whistler (1927)
45	Locustellidae	Sri Lanka Bush Warbler *Elaphrornis palliseri*††					✔		
46	Acrocephalidae	Upcher's Warbler *Hippolais languida*	✔						Williams (1929); Whistler (1945); Abdulali (1986)
47	Hirundinidae	Pale Crag Martin *Ptyonoprogne obsoleta*†	✔						Abdulali (1977)
48	Pycnonotidae	Yellow-eared Bulbul *Pycnonotus penicillatus*††					✔		
49	Phylloscopidae	Radde's Warbler *Phylloscopus schwarzi*		✔		✔			Inskipp & Inskipp (1985). See notes.
50	Scotocercidae	Streaked Scrub Warbler *Scotocerca inquieta*†	✔						Abdulali (1986)
51	Sylviidae	Ménétries's Warbler *Curruca mystacea*†	✔						Roberts (1980). See notes.
52	Zosteropidae	Sri Lanka White-eye *Zosterops ceylonensis*††					✔		
53	Pellorneidae	Brown-capped Babbler *Pellorneum fuscocapillus*††					✔		
54	Leiothrichidae	Spiny Babbler *Acanthoptila nipalensis*††		✔					
55	Leiothrichidae	Orange-billed Babbler *Turdoides rufescens*††					✔		
56	Leiothrichidae	Ashy-headed Laughingthrush *Garrulax cinereifrons*††					✔		
57	Sittidae	Eastern Rock Nuthatch *Sitta tephronota*†	✔						Abdulali & Unnithan (1992)
58	Sturnidae	Sri Lanka Myna *Gracula ptilogenys*††					✔		
59	Sturnidae	White-faced Starling *Sturnornis albofrontatus*††					✔		
60	Muscicapidae	Dull-blue Flycatcher *Eumyias sordidus*††					✔		
61	Muscicapidae	European Robin *Erithacus rubecula*	✔						Roberts (2002). See notes.
62	Muscicapidae	Common Nightingale *Luscinia megarhynchos*	✔						Christison & Ticehurst (1942). See notes.
63	Muscicapidae	Sri Lanka Whistling Thrush *Myophonus blighi*††					✔		
64	Muscicapidae	Whinchat *Saxicola rubetra*					✔		Steoiff *et al.* (2017). See pp. 108-111 in this issue.
65	Muscicapidae	Hooded Wheatear *Oenanthe monacha*†	✔						NHMUK #1874.11.23.102, NHMUK #1886.7.8.4333 -34, NHMUK #1898.12.12.1127, ROM Birds #52875
66	Muscicapidae	Finsch's Wheatear *Oenanthe finschii*†	✔						Williams (1929), Christison & Ticehurst (1942), Abdulali (1988)
67	Turdidae	Spot-winged Thrush *Geokichla spiloptera*††					✔		
68	Turdidae	Redwing *Turdus iliacus*	✔						Roberts (2002). See notes.
69	Turdidae	Naumann's Thrush *Turdus naumanni*			✔				Dalvi *et al.* (2017). See notes.

Pink-rumped Rosefinch *Carpodacus waltoni* in Sandakphu, West Bengal: A first photographic record for India

Ranadeep Sengupta

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The Pink-rumped Rosefinch *Carpodacus waltoni* is a medium-sized finch. For long, its nominate form *C. w. waltoni*, common along the Himalayas, was considered a race of the Beautiful Rosefinch *C. pulcherrimus* (e.g., Ali & Ripley 1987), or sometimes, as part of the Chinese Beautiful Rosefinch *C. davidianus* (e.g., Rasmussen & Anderton 2012). However, it has recently been found that *waltoni* is conspecific with the erstwhile *C. eos* (originally known as Pink-rumped Rosefinch). The taxon has since come to be known as *C. waltoni*, as *waltoni* antedates *eos* (Tietze *et al.* 2013).

C.w. waltoni is common in south-western China and can be found on the eastern part of the Tibetan Plateau (south-eastern Xizang) between an altitudinal range of 3900–4900m. Its status within the Indian limits, bordering the Tibetan facies in north-eastern India, is unclear; while Ali & Ripley (1987) maintain that it is common in Arunachal Pradesh between 3600 and 4500m, Rasmussen & Anderton (2012) treat it as hypothetical based on a few sight reports from northern Arunachal Pradesh. In the absence of any verifiable corroborative evidence of its presence within Indian limits, the India Checklist (Praveen *et al.,* 2016) had also excluded the species. Here, we report the first photographic record of the species for India, from northern West Bengal.

On the cold morning of 26 December 2013 we were on a trekking-cum-birding trip in Sandakphu, West Bengal (3636 m asl). While walking near Sandakphu at noon, we came to a bushy area (*c.* 27.12°N, 87.99°E) where I spotted two rosefinches foraging under a bush. All the time, they were seen on the ground, and were never observed perching on branches. After a fairly long, and patient, wait I could take record photographs of one individual **[139]**. I concluded from the pictures that it could be a Himalayan Beautiful Rosefinch *C. pulcherrimus*.

When I was recently reviewing photographs taken during the trip, I thought that this rosefinch picture needed further confirmation from expert birders. So I sent it to my birding mentor and friend, Arup Kumar Banerjee. He discussed the picture with Santanu Manna, Sujan Chatterjee, and other birders from West Bengal. The picture was also posted on social media, and other online forums: the Chinese Beautiful Rosefinch, and the Pink-rumped Rosefinch were considered most likely. Since the bird could not be identified conclusively, we asked the opinion of Tim Inskipp. He, in turn, sent the image to Peter Clement who identified it as a Pink-rumped Rosefinch based on the shape of the bill, and the head pattern. According to him, the shape of the supercilium also differs from the Chinese Beautiful Rosefinch's where,'it flares quite broadly behind the eyes' (Peter Clement, *pers. comm.,* e-mail dated 04 April 2017).

This becomes the first photographic evidence of the occurrence of a Pink-rumped Rosefinch within Indian limits, and a candidate for inclusion in the India Checklist (Praveen *et al.* 2016).

Ranadeep Sengupta

139. Pink-rumped Rosefinch photographed in Sandakphu, West Bengal.

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A distribution survey of the Forest Owlet *Heteroglaux blewitii* in north-western Maharashtra

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Abstract

A systematic grid-wise survey of Forest Owlet *Heteroglaux blewitii* was carried out over an area of 434 sq km as well as a road survey of along 101 km, to assess its distribution in Nandurbar District, Yawal Wildlife Sanctuary, and Tansa Wildlife Sanctuary in north-western Maharashtra. We recorded 13 detections of Forest Owlets from Nandurbar District, 12 from Tansa Wildlife Sanctuary and none from Yawal Wildlife Sanctuary. Our survey reports the presence of the Forest Owlet in Navapur- and Chinchpada Reserved Forests in Nandurbar District, making three distinct populations in the district that require conservation attention. The Forest Owlet was found to be well distributed in Tansa Sanctuary. Encroachment on forest land, tree cutting, large scale fires, and hunting for the pot are potential threats for the Forest Owlet population in north-western Maharashtra.

Introduction

The Forest Owlet *Heteroglaux blewitti* **[140]** is a small diurnal owl endemic to India (BirdLife International 2017). Until 1884 there were only five confirmed records of the Forest Owlet from the central Indian highlands (Rasmussen & Collar 1998). The lack of authentic records after 1884 led to the belief that it was possibly extinct (Ripley 1952, 1976). In 1997 the Forest Owlet was rediscovered in the Shahada forests in northern Maharashtra (King & Rasmussen 1998). It is currently listed as Critically Endangered under the IUCN Red List of Threatened Species (BirdLife International 2017).

In 1997, surveys focussing on the distribution of the Forest Owlet were initiated by several researchers, resulting in several new sites being identified in Madhya Pradesh (Ishtiaq & Rahmani 2000; Mehta *et al.* 2008, 2015), Maharashtra (Ishtiaq & Rahmani 2000; Mehta *et al.* 2007, 2014; Chavan & Rithe 2009; Laad & Dagale 2015; Raha *et al.* 2017), and Gujarat (Patel *et al.* 2015, 2017). These surveys could not detect the Forest Owlet in Odisha and Chhattisgarh (Ishtiaq & Rahmani 2000; Mehta *et al.* 2008).

In the case of rare species, with isolated populations, the identification of individual populations is essential for the species' conservation. Studies have been carried out on the status and ecology of the Forest Owlet in Toranmal- and Taloda forests in Nandurbar District (Ishtiaq & Rahmani 2000; Jathar & Rahmani 2004; Jathar & Patil 2011). However, apart from these forests, other areas of the district have not been surveyed for the Forest Owlet. There was therefore a possibility that some populations of the Forest Owlet may not have been discovered. The single breeding record of Forest Owlet (Chavan & Rithe 2009) from Yawal Wildlife Sanctuary (*henceforth*, Yawal WLS) needed reconfirmation since previous (Ishtiaq & Rahmani 2000), and subsequent (Jathar & Rahmani 2004; Mehta *et al.* 2008), surveys could not detect the Forest Owlet there. Recently the Forest Owlet was discovered in Tansa Wildlife Sanctuary (Laad & Dagale 2015) but its distribution within the sanctuary was not known. Since the Forest Owlet is surviving in isolated populations it was considered imperative to carry out a systematic survey of the Forest Owlet's distribution in north-western Maharashtra with the aim of understanding its exact distribution in Tansa Sanctuary, verifying its presence in Yawal WLS, and discovering new populations in Nandurbar District.

Prachi Mehta

140. Juvenile Forest Owlet.

Study area

Forests of north-western Maharashtra are located at the junction where the Sahyadris transition into the forests of central India. The details of the three study sites are given below.

Nandurbar District

Nandurbar District (21.00°N–22.05°N, 73.51°E–74.53°E; 5,035 sq km; 300–1200 m asl) is located in the north-western region of Maharashtra state. It is bound on the south and south-east by Dhule District, on the west and north-west by Gujarat state, and on the north and north-east by Madhya Pradesh state. The Satpura Hill Ranges are towards the northern side, and the Sahyadri Ranges towards the western side of the district. The terrain is generally hilly with steep slopes at some places. The climate is hot and dry with average annual rainfall of 872 mm (Dayal 2015). The basaltic soil on the eastern side of the district supports dry teak-bearing deciduous forests consisting of tall trees of teak *Tectona grandis*, *Adina cordifolia, Dalbergia paniculata, Anogeissus latifolia,* and *Lagerstoemia parvifolia*. Reddish, gravelly soil is found on the western side, and supports poor tree growth dominated by species such as *Lannea coromandelica, Boswellia serrata,* and *A. latifolia* with fewer teak trees (Dayal 2015). All over the district the forests are in an advanced state of degradation due to tree cutting and encroachment (Jathar & Patil 2011; **142**). Forest pockets are small and are interspersed with large expanses of scrub and crop fields. In a few parts of Toranmal Range there are forest blocks that are relatively well preserved. In Navapur Range, the rainfall is higher (1200 mm) and there is fairly undisturbed forest along the border with Gujarat. This survey was carried out in eleven forest ranges, namely Toranmal, Akrani, Bilgaon, Navapur, Taloda, Akkalkuwa (East), Akkalkuwa (West), Kathi, Molgi, and Manibeli.

Yawal Wildlife Sanctuary

Yawal WLS (21.25°N–21.06°N, 75.55°–70.09°E, 177.52 sq.km.; 400-1074m asl) is located in Jalgaon District at the southern border of Satpura Hills along the northern border of Maharashtra and Madhya Pradesh. Dense bamboo thickets are found in the upper and middle slopes of the hills. Thick undergrowth of *Strobilanthes callosa* is seen in this area. Along with teak, *B. serrata*, *Acacia catechu*, *A. latifolia*, and *Zizyphus mauritiana* are found throughout the range. In Yawal WLS, we surveyed Jamnya- and Pal forest ranges. Jamnya Range has mainly teak dominated forests. Pal Range has open forests and grassy undercover. There is preponderance of anjan *Hardwickia binata* in the region (Shedke & Khairnar 2013). We also surveyed Compartment 166 in Deoziri Range, which is located to the western side of Yawal WLS, as an earlier sighting of Forest Owlet (Chavan & Rithe 2009) was reported from this region. This area also had teak-dominated forests with sparse undergrowth.

Prachi Mehta

142. Encroachments amidst Reserved Forests in Nandurbar District.

Prachi Mehta

143. Forest Owlet habitat in Tansa Wildlife Sanctuary.

Tansa Wildlife Sanctuary

Tansa Wildlife Sanctuary (*henceforth*, Tansa WLS; 19.42°–19.77°N, 73.16°–73.40°E; 320 sq km; 300–762 m asl) is located in the Thane District of Maharashtra at the edge of the Western Ghats **[143]**. It includes forests in the catchment area of Tansa Dam on Tansa River, and Modak Sagar Dam on Vaitarna River. The terrain is hilly and slopes generally from an eastern to western direction. Hill tops have grassy plateaux while slopes and plains have moderately dense tree cover. The average annual rainfall is 3200 mm. Tansa WLS supports moist teak-bearing forest and moist mixed-deciduous forests with species such as teak, *Terminalia tomentosa*, *T. bellerica*, *Pterocarpus marsupium*, and *Aegle marmelos* (Gujar & Seth 2012). The survey in Tansa WLS was carried out in Tansa, Khardi, Vaitarna, and Parali forest ranges.

Methodology

Digital maps of Nandurbar District, Yawal WLS, and Tansa WLS, in a geographical information system (GIS), were obtained from the Forest Department. We overlaid the maps with 2x2 km grids in the GIS software Q-GIS (version 1.8). Each grid was further sub-divided into sixteen sub-grids of 500x500 m. The subgrids were superimposed on Google Earth images of the study area. We selected only those sub-grids that contained forest cover at their centres. Alternate sub-grids were selected for sampling, which amounted to 25% sampling. Each sampled sub-grid was visited once during the survey period, following the protocol recommended by Johnson *et al.* (2009).

A systematic distribution survey of the Forest Owlet in Nandurbar District and Yawal WLS was carried out from August to December 2016. The survey in Tansa WLS was carried out from April to June 2016 (Fig. 1). The survey was carried out from 0600 to 1100 hrs, and 1500 to 1800 hrs by two teams, each team comprising one field biologist and one local field assistant. Each team visited a different sub-grid ensuring greater coverage of area. We used call broadcast technique for the survey, which has been used successfully for other owl species (Fuller & Mosher 1981; Forsman 1983; Conway & Simon 2003; Hausleitner 2006; Johnson *et al.* 2009). To avoid disturbing

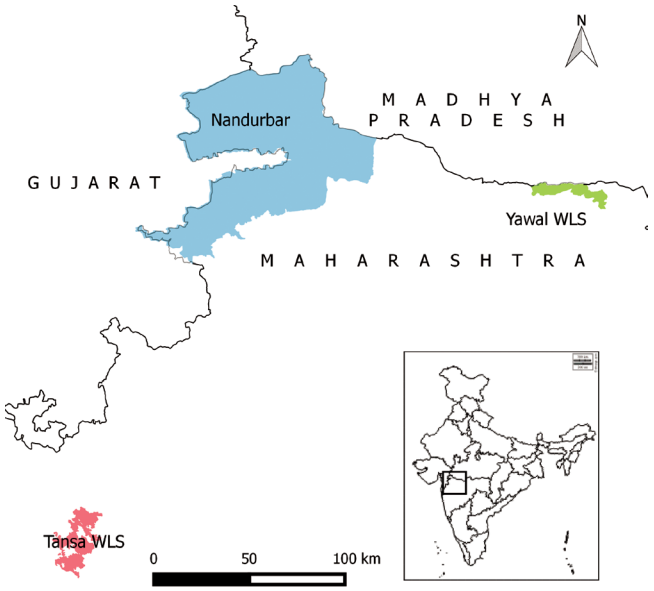

Fig. 1. Location map of Nandurbar District, Yawal Wildlife Sanctuary, and Tansa Wildlife Sanctuary.

the birds, the duration of the call-broadcast was kept to a minimum. For detecting the Forest Owlet, its contact call was broadcast from the centre of the sub-grid (known as the calling station), from a portable speaker, for two minutes followed by three minutes silence to listen for a response by the species. If no response was forthcoming this procedure was repeated once again (Johnson *et al.* 2009). This gave a maximum search time of ten minutes at each survey station, in which the actual broadcast time was a maximum of four minutes. If a response was received, we searched for the bird to locate it and confirm the species. If the Forest Owlet was detected in one of the sub-grids then all the sub-grids surrounding that were surveyed in an endeavour to locate additional birds. This sampling protocol is known as 'adaptive cluster sampling' (Thompson 1989), and has been used successfully in previous surveys (Mehta *et al.* 2008, 2015; Johnson *et al.* 2009; Mehta & Kulkarni 2014). At each survey station, we made a visual estimate within a 50 m radius from the calling station, of the percentage landuse for forest, agriculture, and habitation, within the sub-grid. We recorded signs of tree cutting, encroachment, and forest fires. Threats, such as bird-hunting, and trapping were recorded by direct observations and also by informal discussions with field staff and local people. In regions where the terrain was very steep, and the survey grids inaccessible, we carried out survey along main roads and access roads at intervals of approximately one kilometer. The range-wise effort for grid- and road survey is shown in Table 1.

Results

The survey recorded 25 detections of Forest Owlets, each detection consisting either of a single bird, or a pair (Table 2). Of these, 13 detections were in Nandurbar District at 11 locations (Fig. 2), and 12 were in Tansa WLS at 12 locations (Fig. 3). No Forest Owlets were detected in Yawal WLS (Fig. 4). The survey was successful in detecting the Forest Owlet in the Navapur- and Chinchpada ranges, which are new sites for the species.

Table 1. Range-wise survey effort in the study area

Region	Range	Total area surveyed	
		Grid survey (sq km)	Road survey (km)
Nandurbar	Toranmal	68	19
	Taloda	20	05
	Navapur	20	19
	Chinchpada	04	04
	Bilgaon	08	-
	Akrani	20	03
	Akkalkuwa	24	-
	Kathi	20	-
	Molgi	12	-
	Manibeli	28	08
	Subtotal	214	58
Yawal WLS	Pal	04	-
	Jamnya	44	-
	Subtotal	48	
Tansa WLS	Tansa	84	06
	Vaitarna	44	08
	Khardi	24	15
	Parli	20	14
	Subtotal	172	43

Table 2. Range-wise numbers of Forest Owlet recorded during the survey

Area	Range	Location	No. of birds seen
Nandurbar	Toranmal	Oklhapani Road	One pair
		Oklhapani Stream	One pair
	Taloda	Kelwai Farm	One pair
		Kelwai Road	One pair
		Kelwai stream	One pair
	Navapur	Charanmal	One pair
		Ukalpani Road	Two pairs
		Ukalpani farm	One bird
		Bari Village	One pair + One bird
	Chinchpada	Khoksa Road	One pair
		Khoksa Village	One bird
Tansa WLS	Tansa	Gadelpada	One pair
		Koshimbwada	One bird
	Vaitarna	Kuwaripada Village	One pair
		Kuwaripada Road	One bird
		Rajpuri Road	One pair
		Pendri	One pair
	Khardi	Borala Road	One pair
		Borala Village	One bird
	Parli	Ujjani Road	One pair
		Panchghar Road	One bird
		Parli Road	One bird
		Parli-Vaitarana Road	One pair

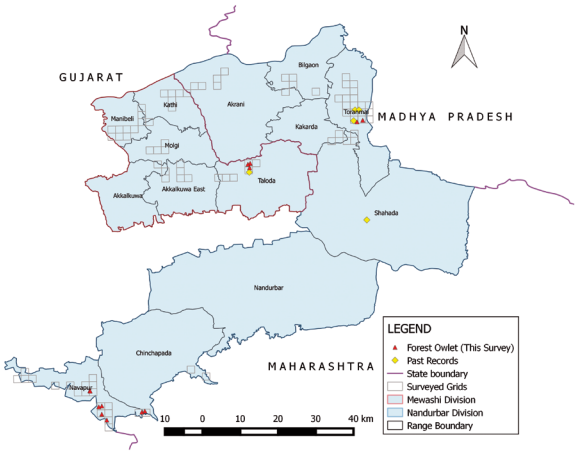

Fig. 2. Surveyed grids and Forest Owlet locations in Nandurbar District. Past records refer to those of Davidson (1882), Rasmussen & King (1998), and Ishtiaq & Rahmani (2000).

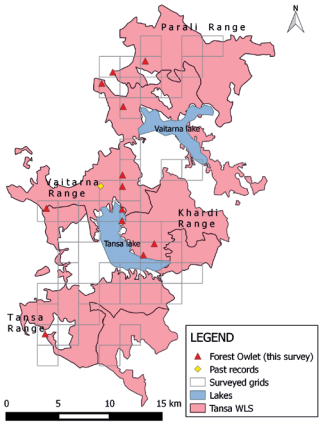

Fig. 3. Surveyed grids and Forest Owlet locations in Tansa Wildlife Sanctuary.

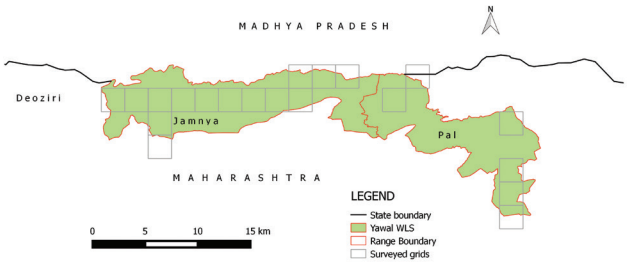

Fig. 4. Surveyed grids in Yawal Wildlife Sanctuary.

Discussion

Nandurbar District

There are three confirmed populations of the Forest Owlet in Nandurbar District, of which, those in the Toranmal- and Taloda forests were known, whilst the population in the Navapur- and Chinchpada forest ranges was discovered during this survey (Fig. 2). The Navapur-Chinchpada population could be the larger population, as we had eight detections there, compared to Toranmal (two) and Taloda (three). Davidson (1882: 292) reported the Forest Owlet from Toranmal and Taloda. In 1997 the rediscovery of Forest Owlet was also from Toranmal (King & Rasmussen 1998). Subsequent surveys, up till 2011, confirmed the presence of the Forest Owlet at Toranmal and Taloda (Jathar & Patil 2011), indicating that the Forest Owlet had managed to survive at this locality for over a century.

The Forest Owlet population in Navapur Range occurs at a distance of 80 km from the population in the Taloda Range, and 100 km from the population in the Toranmal Range. The Navapur Range lies at the edge of the Western Ghats. There have been recent reports of Forest Owlets from Tansa WLS and Nashik District, both of which are located near the Western Ghats. The Forest Owlet has also been reported from Purna WLS in Gujarat (Patel *et al.* 2015), whose boundary is located at a distance of less than 100 m from the Navapur Range in the Western Ghats. Nandurbar District therefore seems to be a junction where the Western Ghats and the Satpura populations meet (Fig. 2).

In Nandurbar District, agricultural expansion and encroachment on forest land are possible threats and causes of concern for the conservation of the species (Jathar & Rahmani 2004; Jathar & Patil 2011). During our survey, we observed old encroachments, as well as new ones around the Forest Owlet habitat in Toranmal, Navapur, and Taloda ranges. Disturbingly, vast stretches of land that are marked 'forest' on the Forest Department maps were found to be agricultural land and degraded scrub interspersed with small forest patches. In Taloda Range most forest blocks were barely 100–200 m in extent. Local forest officers reported that these forests were decimated during large scale encroachment by the local tribal population in the 1970s–1980s.

The impact of forest degradation on Forest Owlet populations has not been studied. However, considering that the Forest Owlet is a forest-dwelling species, it is likely that deforestation will have a deleterious impact on its survival.

Though the Forest Owlet continues to survive in Nandurbar District, its occurrence is highly localised, with small populations, and is restricted to just three sites that have forest patches with large trees. Locals capture small owls using wire traps placed outside the entrances of their nest cavities **[144]**. The impact of these threats should also be closely monitored for any adverse impacts on the Forest Owlet's population.

Yawal Wildlife Sanctuary

In 1999 and 2002, Forest Owlet surveys were carried out in Yawal WLS but the bird was not detected there (Ishtiaq & Rahmani

Shubhadeep Mukherjee

144. Wire trap outside the entrance of an owlet's nesting cavity.

Shreenath Chavan

145. Owl meat cooked for Pot. Owl feathers are also visible.

2000; Jathar & Rahmani 2004). In 2003, Chavan & Rithe (2009) reported a pair of Forest Owlets in Compartment 166 of the Deoziri Range, just outside the sanctuary. However a subsequent survey could not locate the species (Mehta *et al.* 2008). During the present study we surveyed the entire sanctuary through our grids, and specifically the Deoziri Range, but could not locate the bird. Discussions with local villagers, birders, and forest department staff also did not reveal confirmatory information about the existence of the species in the sanctuary.

Tansa Wildlife Sanctuary

The Forest Owlet was found to be well distributed in Tansa WLS, occuring in all four forest ranges with a total of 14 detections (Fig. 3). These forests are fragmented into a patchwork of dense forest, open forest, scrub, agricultural fields, and human habitation. Tree-cutting and largescale forest fires are potential threats to the Forest Owlet's habitat here. As Tansa WLS is located close to Mumbai, pressures from urbanisation are another potential threat. There is a plywood factory in Aghai Village, adjacent to the sanctuary, and an engineering college has also been established in the same village. Hunting for wild animals and birds, including owls, for meat, is fairly common in the sanctuary. Local children use catapults to hunt birds, including small owls, for the pot **[145]**.

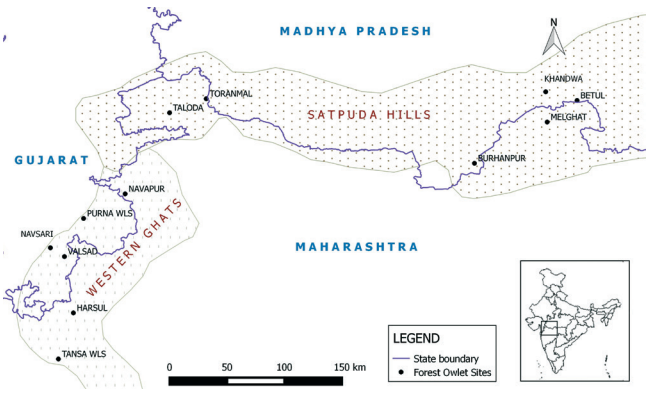

Fig. 5. Confirmed locations of Forest Owlet from central- and western India.

Conclusion

At present there are twelve confirmed populations of the Forest Owlet in the country, of which six sites are in Maharashtra, three are in Madhya Pradesh, and three are in Gujarat (Fig. 5). It is important to garner government and public support for its conservation at each of the sites. This survey identified several potential threats such as deforestation, tree-cutting, and fire, but the response of Forest Owlet populations to these factors has not been studied. It is important to study the impact of these factors in order to formulate a conservation plan for the species. All populations should be monitored regularly to assess the gravity of the threats, and to identify new threats, and conservation actions framed to mitigate them.

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Whinchat *Saxicola rubetra* in Sri Lanka in February 2015: First record for the island and the Indian Subcontinent

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On 08 February 2015, on a birding trip to Sri Lanka, while watching birds and mammals in Udawalawe National Park (at 6.445261°N, 80.889268°E; Fig. 1) KS found a bird, which he identified spontaneously as a Whinchat *Saxicola rubetra*. The other German birders (WP, MP, WM, and MZ) immediately confirmed this ID, since they were all familiar with that species. A quick look at Warakagoda *et al.* (2012), and Grimmett *et al.* (2011) showed that Whinchat was not mentioned in those field guides for Sri Lanka, nor for the Indian Subcontinent. Therefore it was obvious, that we had seen a very rare bird for the region.

Interestingly, some 20–40 m away, on the same track, was a Siberian Stonechat *S. maurus*, which is considered a vagrant to Sri Lanka (Warakagoda *et al.* 2012)

The first identification of the Whinchat was based on the following field marks: The jizz of the bird was that of a typical chat—thickset, sitting upright, with a rather short tail, and a large dark eye. The most obvious pattern was the broad and long supercilium, which was buff in front of the eye and almost whitish behind. The upperparts were dark brown with dark centers to feathers and buff fringes, giving a scaly and streaky impression. The underparts were buff on the breast and breast sides, and whitish on the belly. The primary projection was about three-fourths the length of the tertials. The short bill and the legs were blackish.

After some local phone calls it was clear that Whinchat was a 'first' for Sri Lanka and, presumably, for the Indian Subcontinent.

Fig. 1. Location of the observation in Udawalawe National Park, Sri Lanka. Map by GoogleMaps.

Hence the ID had to be unequivocally established. However, two features on this bird were not concurrent with a typical Whinchat: (1) The primary projection on this bird may have been a bit shorter than what is expected for a Whinchat, and (2) The white of the outer tail feathers was not visible. This was puzzling, since this feature normally should not be difficult to see at close range, and the bird was very close, about five to 30 m from our car. Since the bird stayed for at least 22 days, until 01 March (Rajeev 2015: 53), many observers saw it, and more photographs could be taken. These form the basis for a thorough identification process.

Identification revisited

The missing white in the tail of the bird while observing it and on every image taken in flight, as well as some possible discrepancies in the primary pattern, raised the question about the correct ID. Two potential alternatives that were discussed were Siberian Stonechat, and Stoliczka's Bushchat *S. macrorhynchus.* None of us were familiar with the latter, but it was discussed using the images available in Oriental Bird Images (http://orientalbirdimages.org/) that show a well-defined supercilium. Furthermore, some Siberian Stonechat pictures on Oriental Bird Images seem to have an extremely bright supercilium, showing a superficial similarity with Whinchat. Hence, we discuss these points further below, using these images as well as Clement & Rose (2015).

Stoliczka's Bushchat

This species is very localised and rare in north-western India, and may be extinct in adjacent Pakistan. It lives in semi-desert habitats and moves only short distances between breeding and wintering areas (Clement & Rose 2015). Very few scattered records, away from these localities, exist in the north and west of India (Grimmett *et al.* 2011). Thus, Stoliczka's Bushchat in Sri Lanka would be a very unlikely option.

In first-winter plumage Stoliczka's Bushchat can be surprisingly similar patterned to a Whinchat, with a bright, and two-toned, supercilium, dark brown feathers on the back with broad buff fringes, giving a streaky appearance, and un-streaked buff to whitish underparts.

However, two structural features of the observed bird point strongly against this species: The bill of Stoliczka's Bushchat is more slender and longer, and it is a more slender and much longer-tailed bird. Furthermore, its rump should be un-streaked, which was definitely not the case in our bird **[146]**. Also, Stoliczka's Bushchat lacks the cinnamon tinge on the breast, which our bird shows quite strongly on some of the images **[147, 148]**. It also has a shorter primary projection.

Palitha Antony

146. Whinchat in Udawalawe National Park, Sri Lanka, 17 February 2015, showing the upperwing pattern with no visible white spots at the base of the primaries, and the diagnostic rump.

Klemens Steiof

147. Whinchat in Udawalawe National Park, Sri Lanka, 08 February 2015. This bird is in heavy pre-breeding moult. The comparably short but strong bill, the broad, and two-toned supercilium, dark upperparts with buff feather fringes, buff or cinnamon tinged underparts, and a primary projection of ***c***. ¾ can be seen.

Sudheera Bandara

148. Whinchat in Udawalawe National Park, Sri Lanka, 21 February 2015. Compare the advances in moult with **147** and **148**, with more delicate head pattern and the developed cinnamon to orange breast.

Siberian Stonechat

This species has a vast range all over Asia, with almost all populations being highly migratory, thus having a high potential to occur outside its normal wintering range. At least four subspecies winter in the Indian Subcontinent, though it's a vagrant to Sri Lanka with just one prior record (Seneviratne & Seneviratne 2013).

Wolfgang Püschel

149. Siberian Stonechat in Udawalawe National Park, Sri Lanka, 08 February 2015. This bird was *c.* 30 m from the Whinchat and is the second record of this species for Sri Lanka.

The Siberian Stonechat has a very similar jizz, shape, and size to Whinchat. While the European Stonechat *S. torquatus* is a short-distance migrant, thus having short wings and a short primary projection, some subspecies of Siberian Stonechat migrate long distances, showing a longer primary projection and sometimes, a bright supercilium.

In contrast, Siberian Stonechat should show some features, which the observed bird did not have. The rump should be pale and largely un-streaked, while our bird showed a very streaky rump, which was only slightly paler than the back. Siberian in flight should show a whitish panel on the inner wing on the upperparts and darkish underwing coverts, which was not the case in both instances, in our bird. And quite often a Siberian Stonechat shows a whitish chin/throat, which was visible on the individual seen some meters away from the Whinchat **[149]**.
The images clearly show that the bird does not have these features.

Whinchat

This species is a long-distance migrant from Europe, and western Asia, to sub-Saharan Africa. Therefore, it has the longest primary projection of the three species mentioned so far **[147]**.

Jizz, shape, and structure of the observed bird all fit a Whinchat, though the primary projection was slightly shorter (but see below). Most of the features mentioned above match a Whinchat: short and rather stout bill, bright supercilium, streaked crown, scaly and streaky dark brown upperparts with dark-centered feathers and buff fringes, as well as buff to cinnamon breast and breast sides, and whitish (belly) underparts. The heavily streaked rump and uppertail coverts are an important diagnostic mark too **[146, 150]**. This is congruent to a Whinchat, but not to the other species mentioned above.

One of the most obvious features of a Whinchat, which was not seen by us in the field, nor is seen on any image of the bird, is the extensive white in the basal part of all, except the central tail feathers, which (almost) any Whinchat has, regardless of age or sex. In fact, this feature is highlighted for Whinchats in many works (Svensson 1991; Svensson *et al.* 2010; van Duivendijk 2011; Jenni & Winkler 2011; Clement & Rose 2015). In a closed tail the white should be visible along the entire length of the outer web of the outermost tail feather (TF6); at more than half of the length of the outer web of the next two tail feathers (TF5 and TF4); and at about one-third of TF3 (Hansen & Synnatzschke 2015). At best, the bird showed a faint whitish margin to the outer tail feathers **[146]**, but this might be visible on the other species too.

Svensson (1992) mentioned that the white could, sometimes, be concealed. This cannot be completely excluded for the Sri Lankan bird. Browsing through the some 100 images on the 'Internet Bird Collection' (http://www.hbw.com/ibc) we see that the white is always concealed on the upper side and only visible if the tail is spread open. On the underside it is sometimes concealed and sometimes visible. We did not see any white in the tail while observing the bird for about one hour, even though, quite often, it flew short sallies. It cannot be excluded that the tail feathers were concealed all the time, but we would rate this rather unlikely.

Hansen & Synnatzschke (2015) mentioned, with regards to Cornwallis & Smith (1963), that there are individuals with rufous brown, instead of white, in the tail. Also, Vinicombe *et al.* (2014) stated, that some individuals have dull buff tail patches, though there is no information if this feature is related to age classes, sex or a part of the range. This might be quite a rare feature, but it could, potentially, explain the plumage in our bird. In **[151]** the

Palitha Antony

150. Whinchat in Udawalawe National Park, Sri Lanka, 17 February 2015. The brownish underwing coverts and the streaked rump exclude Siberian Stonechat.

Klemens Steiof

151. Whinchat in Udawalawe National Park, Sri Lanka, 08 February 2015. The outer tail feather gives the impression of having a dark (dull buff) instead of white base.

outermost tail feather is clearly visible from below, along most of its length, and there is definitely no white in it. Instead of this, one has the impression, that there is a border between the dark proximal part and a slightly lighter basal part. This would conform to the information given by Hansen & Synnatzschke (2015), that the white can be replaced by dull buff.

To conclude about the tail, it seems likely, that the bird did not have white in the tail but dull buff instead, even though it cannot be completely excluded, that the white was always concealed.

The white spot on the upper base of the primaries is often concealed by the primary coverts (van Duivendijk 2011), thus is not an important field mark. It might be even absent in females (Clement & Rose 2015).

The primary projection of the Sri Lankan bird was long (more than ¾ of the visible tertial length), but definitely less than that of a typical Whinchat. This might be due to feather wear, because the margins of the scapulars, and mantle feathers might be heavily abraded by February, or even in active moult, showing more of the tertials than in fresh plumage. This has an influence on the tertial-primary ratio.

Since the Whinchat has a pre-breeding moult from January to March (Clement & Rose 2015), the slight changes in the appearance of the bird in February 2015 might be due to a moult instead of wear. Obviously, the cinnamon tinge in the breast feathers was more obvious on 21 February than on 08 February **[148, 147, 151]**.

The bird's age cannot be identified with certainty, but the absence of whitish spots on the primary bases of the upper wing could be an indicator of a first winter bird. This age class is also more prone to vagrancy.

Discussion

The breeding range of the Whinchat is spread over a vast distance in the northern hemisphere, from western Europe to central Asia, until about 94°E (Clement & Rose 2015). In Asia its range is mainly north of the steppe zone, i.e., north of ***c***. 50°N, though there is an isolated range in the Caucasian region. All birds spend the winter in sub-Saharan Africa, covering a few, to several thousand kilometers during their migration each autumn and spring.

Since the Whinchat is a very rare, or scarce, migrant on the Arabian Peninsula (Clement & Rose 2015), it is likely that the eastern populations leave their breeding grounds in a more westerly direction, turning southwards, towards Africa, later on their migration. This is speculative, because most countries of south-western Asia are not well-watched by birders, particularly for passage migrants. On the other hand, the Whinchat is an easy bird to spot as it favours open habitats, preferring to sit on top of low vegetation: hence its rarity in south-western Asia, as a migrant, might be real. However, as a long distance migrant the Whinchat has clearly the potential to occur far away from the main migration routes. It is likely, that the observed bird arrived in Sri Lanka in the autumn of 2014, moved as far south as possible, selected an open habitat, and stayed there over the winter.

Rasmussen & Anderton (2012) listed the species as 'hypothetical' for South Asia. Until 2012, 454 bird species have been recorded in Sri Lanka (Warakagoda *et al.* 2012). Our observation adds the Whinchat to the Sri Lanka list.

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An incidence of cannibalism in the Greater Spotted Eagle *Clanga clanga*

The Greater Spotted Eagle *Clanga clanga* is considered 'Vulnerable' under the IUCN Red List of Threatened Species (BirdLife International 2017). It is, mainly, a migrant to the Indian Subcontinent (Naoroji 2006; BirdLife International 2015). It is a winter visitor to Gujarat (Ganpule 2016) and is regularly observed in small numbers in the Little Rann of Kachchh.

It is known to be a generalist feeder and has been recorded taking frogs, dead fish, reptiles, small birds, young storks, herons, and various waterfowl. It has also been observed scavenging on a terrapin that had been maimed or partly eaten by Egyptian Vulture *Neophron percnopterus*, Red-headed Vulture *Sarcogyps calvus*, and Pallas's Fish-eagle *Haliaeetus leucoryphus* (Naoroji 2007).

On 25 October 2016, during a raptor survey in the Little Rann of Kachchh, Gujarat (23.13ºN, 71.44ºE), I observed a juvenile

152. The cannibalistic juvenile Greater Spotted Eagle.

Devvratsinh Mori

153. Carcass of a Greater Spotted Eagle.

Greater Spotted Eagle feeding on the carcass of another bird **[152, 153]**. While I was watching it, a Western Marsh Harrier *Circus aeruginosus* arrived on the scene and disturbed the eagle, which flew away. When I examined the carcass, it turned out to be that of an adult Greater Spotted Eagle. The carcass was of a similar-sized eagle, with dark brown wing coverts, including dark underwing coverts darker than the primary feathers, creamy-white spots on body, bushy trousers, yellow feet and cere, round nostrils, strong bill, and a gape reaching the centre of the eye. The carcass was not fresh, and might have been a day old. Though not unexpected, this incidence of cannibalism is worth documenting.

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Yellow-throated Martens *Martes flavigula* raid a Great Hornbill *Buceros bicornis* nest

In June 2015, I was volunteering with Nature Conservation Foundation (*henceforth*, NCF) in their Hornbill Nest Monitoring Project, NE India, at Pakke Tiger Reserve (27.09°N, 92.82°E), Arunachal Pradesh. My task was to observe the hornbill nests that were pre-marked by the NCF team, and take detailed notes on the feeding habits, and behaviour of the nesting birds. The particular nest around which this narrative revolves was special because the pair of Great Hornbills *Buceros bicornis* has been extremely loyal to this tree, and have been nesting on it since a long time (Aparajita Datta, *pers. comm.,* verbally).

Sutirtha Lahiri

154. A yellow-throated marten would peek out of the hole whenever the Great Hornbills weren't mobbing them.

On 26 June 2015 at 0800 hrs, on our usual monitoring round, Turuk Bruh, Pranjal Barman, and I noticed that the nest opening was wider than usual, which was pretty surprising because the female hornbill had come out a few days ago, and the chick inside wasn't developed enough to emerge yet. So we waited, and to our surprise, we saw that the hornbill pair was perched near the nest, and was constantly trying to 'mob' the nest. Soon enough, out popped two bear-like heads of a pair of Yellow-throated martens *Martes flavigula* **[154]** that had preyed on the hornbill chick!

Yellow-throated martens are Mustelids. They usually hunt in pairs or in groups of three–four, and have a wide diversity of diet ranging from small birds, insects, eggs, or anything that they feel can be overpowered! The martens had apparently targeted the hornbill nest, since a hornbill chick is not only an easy prey, but also quite a mouthful. However, their joy was short-lived, for they soon had to come out of the nest cavity. This was going to be a dangerous venture, for two protective parents, antagonized by the loss of their chick, furiously attacked the martens as they tried to get out of the hole, forcing them to recoil back into the safe confines of the nest cavity **[155]**. Whenever one of them would peek out, to see if the coast was clear, it was greeted by a hornbill parent flying towards it. The hornbill pair kept mobbing them continuously. However, in the end, they abruptly stopped attacking the predators and, one by one, both the hornbills flew away. The entire faceoff lasted a good half hour. The coast was clear now, and the martens quickly came out of the nest. Climbing down from the tree, they stopped midway for brief durations **[156]**, before scurrying down to the forest floor and disappeared.

Sutirtha Lahiri

155. The male Great Hornbill calls in aggression.

156. Safely out of the cavity, the martens took pit stops on the branches before scurrying to the forest floor.

We were all pretty upset about this sudden turn of events, lamenting the wasted efforts of the hornbill pair to raise the chick, but nature is never ruled by emotions. However brutal it may sound, the very law of nature is to 'eat or be eaten' and that is how life goes on.

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Snapshot sightings

Chestnut-headed Bee-eater from Okhla, Delhi NCR

Jaswinder Waraich

While on a birding trip to Okhla Bird Sanctuary (28.55°N, 77.31°E), Delhi NCR, I found a Chestnut-headed Bee-eater *Merops leschenaulti* sitting on an open perch on 08 April 2017. The bird allowed all my co-birders to see well and the same was photographed. This appears to the first record of this species from Delhi NCR (Harvey et al. 2006).

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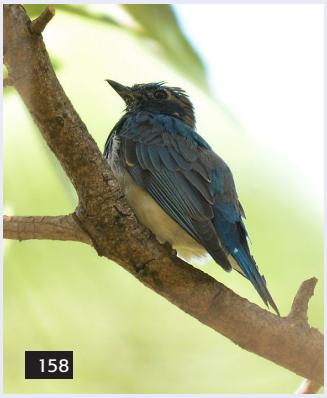
Blue-and-White Flycatcher from Matheran, Maharashtra

Mayuresh V Khatavkar & Vinod Gorle



A sub-adult Blue-and-White Flycatcher *Cyanoptila cyanomelana* was photographed from Matheran (19.00°N, 73.28°E, c.800m asl), Raigad, Maharashtra on 13 March 2017. This is the tenth record from the subcontinent, sixth from the Western Ghats and the third from Maharashtra. Interestingly, seven of these were in the month of March one in February, while the other two were in November; our record strengthens the fact that it's a spring passage migrant in our region (Barve & Kamath 2016, Bhoopathy & Indrajith 2016, Rajeshkumar *et al.* 2014).

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Purple-backed Starling from Borgochia, West Bengal

Amitava Dutta

I photographed a Purple-backed Starling *Agropsar sturninus* along with a mixed group of Asian Pied- *Gracupica contra* and Chestnut-tailed Starlings *Sturnia malabarica* at Ananya Hatchery (22.44°N, 88.30°E), Borgochia, West Bengal on 15 April 2017. There are only nine prior records of this species from the mainland of Indian subcontinent and is an addition to West Bengal avifauna; though it has been reported thrice from the neighbouring Bangladesh (Dilip & Arun 2016).

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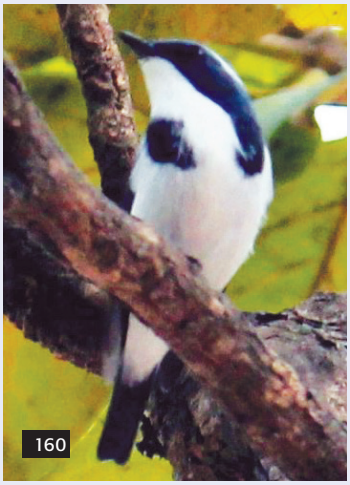
Ultramarine Flycatcher from Jawai, Rajasthan

Ashish Jangid & Vivek Sharma



On November 30, 2016, an adult Ultramarine Flycatcher *Ficedula superciliaris* was photographed from Jawai Leopard Conservation Reserve (25.10°N, 73.15°E), southern Rajasthan. It is a rare winter visitor to southern Rajasthan with prior reports in checklists from Kumbhalgarh WLS (Anonymous 2010), and Udaipur (Mehra *et al.* 2011).

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