Notes on the Great Grey Shrike (Laniidae: *Lanius excubitor*) complex in north-western India: Variation, identification, and status

Prasad Ganpule

Ganpule, P., 2016. Notes on the Great Grey Shrike (Laniidae: *Lanius excubitor*) complex in north-western India: Variation, identification, and status. *Indian BIRDS* 11 (1): 1–10.
Prasad Ganpule, C/o Parshuram Pottery Works, Nazarbaug, Morbi 363642, Gujarat, India. E-mail: *prasadganpule@gmail.com*
Manuscript received on 15 March 2015.

Abstract

Results of a two-year study on the resident Great Grey Shrike *Lanius excubitor lahtora* are presented here. It is shown, based on field study of *lahtora* in Gujarat, and Rajasthan, that there is considerable variation in plumage, and head, and wing patterns, which has not been reported earlier. Separation of *lahtora* from *pallidirostris* is very difficult, and from *aucheri*, and *homeyeri*, not simple. A host of features are required to be studied to separate it. These preliminary observations of *lahtora* show that this taxon is highly variable, and that molecular study is needed to determine the divergence in the Great Grey Shrikes here.

Introduction

The Great Grey Shrike *Lanius excubitor* is a widespread resident in South Asia. It comprises four races of which, *lahtora* is mostly resident; *pallidirostris* is a rare winter migrant to the north-western regions; and *homeyeri*, and *aucheri* are best treated as vagrants (Rasmussen & Anderton 2012). Though *lahtora* is a widespread breeder in suitable habitats in northern, north-western, and western India, its plumage variations have not been well-described. I present here the results of a two-year study on *lahtora*, in north-western India, and attempt to describe how it could be separated, in the field, from its conspecifics.

Taxonomy

Global taxonomy of the Great Grey Shrike complex is not yet resolved. Different works on South Asian ornithology have treated these four races in various ways (Table 1). However, a recent study, based on the mitochondrial DNA of 18 taxa (Olsson *et al.* 2009), including all four regional forms, has challenged these traditional *excubitor*, and *meridionalis* classifications. The Clades in Olsson *et al*. (2009) are arranged so that Clade A1 contains *lahtora*, and *pallidirostris*; A2, *aucheri*, apart from the extralimital *buryi*; and A3, *excubitor, homeyeri*, and *leucopterus*[1]. They discuss three possible taxonomic treatments for this group, together with their respective merits, and demerits. Two of these suggest the lumping of all four regional taxa in Clade A under *L. excubitor*, while the third, treating each Clade as a separate species. The third classification, the most radical among the three, would mean three different species for the Indian Subcontinent: *lahtora*, including *pallidirostris* under one species, with *aucheri*, and *excubitor* (including *homeyeri*) as the other two species. Though Olsson *et al.* (2009) state that phylogenetic pattern is well supported in the study, more data in the future may shed light on new possibilities. This might be the reason for retaining all taxa under *L. excubitor*, using the most parsimonious interpretation of the molecular tree, as followed by Rasmussen & Anderton (2012), and Dickinson & Christidis (2014). However, it must be noted that the Dutch Committee for Avian Systematics (*henceforth* CSNA) has partially accepted this radical taxonomic change by splitting Clade A into two with Clade A1 + A2 taxa grouped as a single species under *lahtora* ['Asian Grey Shrike'] (van den Berg 2015). The Ornithological Society of the Middle East (*henceforth* OSME) retains the existing treatment: *meridionalis* for Clade A1 + A2, while suggesting a likely taxonomic arrangement where each of the clades A1, A2, and A3 are treated as independent species (OSME 2015). In this fluid scenario I follow Dickinson & Christidis (2014), fully aware that this might itself be provisional.

Field identification of the different taxa is complex, and a full range of characters needs to be studied to arrive at any conclusion. The situation is further complicated by the occurrence of intergrades. The known criteria for the identification of typical individuals are given in Lefranc & Worfolk (1997), Harris & Franklin (2000), Ali & Ripley (2001), Yosef & ISWG (2008), and Rasmussen & Anderton (2012). Careful observation of general dorsal colour, head, and wing pattern, ventral colours, and the tail pattern is required to identify these birds.

Table 1. Great Grey Shrike: Taxonomic treatments

Taxon	Ali & Ripley (2001); Rasmussen & Anderton (2012); Dickinson & Christidis (2014)	Kazmierczak (2000); Yosef & ISWG (2008); Panov (2011); Lefranc & Worfolk (1997); Grimmett *et al.* (2011); Clement *et al.* (2015)
homeyeri	Great Grey Shrike *L. excubitor homeyeri*	Great Grey Shrike[1] *L. excubitor homeyeri*
aucheri	Great Grey Shrike *L. excubitor aucheri*	Southern Grey Shrike[2] *L. meridionalis aucheri*
lahtora	Great Grey Shrike *L. excubitor lahtora*	Southern Grey Shrike *L. meridionalis lahtora*
pallidirostris	Great Grey Shrike *L. excubitor pallidirostris*	Southern Grey Shrike *L. meridionalis pallidirostris*

[1.] Clement *et al.* (2015) gives Northern Shrike as the English name for *homeyeri*.
[2.] Grimmett *et al.* (2011) does not cover *aucheri*

[1.] Most taxonomies, including Dickinson & Christidis (2014), synonymise *leucopterus* with *homeyeri*

Methods & observations

Adult Great Grey Shrikes, henceforth referred to as *lahtora*, were

studied in Gujarat, and Rajasthan for two years, from February 2013 to February 2015. *Lahtora* occurs in good numbers in the following areas. Gujarat: The Little Rann of Kachchh (LRK), the Banni, and Naliya areas in the Greater Rann of Kachchh (GRK), parts of Saurashtra; Rajasthan: Desert National Park (DNP), and Tal Chappar. Adult *lahtora* were photographed, their wing pattern, while they were flying, noted, and dorsal, and ventral colour, and head pattern observed in detail. To study the wing, and tail patterns in detail, good photographs are essential, and it is difficult to photograph these birds in flight. Hence, photographs were collected from other birdwatchers from different areas, mainly from Rajasthan and from Maharashtra. Photographs posted on various Internet websites (www.orientalbirdimages.org; www.indianaturewatch.net; www.ibc.lynxeds.com) were also studied in detail. Though a study of photographs cannot be compared to an actual field study, it is still essential for studying wing-, and tail details, and to gain a general idea regarding individuals found in different areas. Some of the observations from the western part of LRK may be of the same individuals, as two–three different birds were seen in the same area, over a period of four months.

Only adult birds were considered for this study. Sexual dimorphism in adult *lahtora* is minimal (adult females have a finer facial mask on the forehead, and brownish upper parts), but I have not attempted to sex individuals. I have not studied museum skins, and the results presented here are based on personal field observations (Table 2), and photographs of more than 50 individuals, apart from studying a large number of photographs taken by other people. Descriptions of plumage variations are supplemented with relevant photographs, and illustrations.

Table 2. Author's observations of Great Grey Shrikes

Locality	State*	No. of birds	Date
GRK	GJ	05	February 2013
GRK	GJ	08	November 2014
GRK	GJ	04	December 2014
GRK	GJ	02	February 2015
LRK	GJ	03	March 2013
LRK	GJ	02	April 2013
LRK	GJ	01	October 2013
LRK	GJ	02	December 2013
LRK	GJ	02	March 2014
LRK	GJ	02	October 2014
LRK	GJ	03	November 2014
LRK	GJ	06	December 2014
LRK	GJ	06	January 2015
LRK	GJ	01	February 2015
DNP	RJ	15	February 2014
Dwarka, Jamnagar	GJ	02	September 2014
Dwarka, Jamnagar	GJ	02	January 2015
Morbi area, Rajkot	GJ	01	September 2014
Morbi area, Rajkot	GJ	01	January 2015

*GJ=Gujarat; RJ=Rajasthan

Results

Plumage: Dorsal colours vary from pale whitish-grey, to a dark smoky-grey. Plumage tones ranging between pale, and dark grey are more common. The rump is slightly paler than the mantle in all birds. Most adults show white scapulars. Underparts are pure white, but a few birds ($n < 5$), showed a faint greyish / buffish wash. Often, *lahtora* roosts / perches with its wing, and mantle feathers raised, thus obscuring the mantle colour and wings, making it difficult to judge plumage colours and patterns. **[1–1A]**.

1 November 2014, Greater Rann of Kachchh, Gujarat. Note raised feathers obscuring the mantle and wings. Many times Indian Grey Shrikes have a habit of roosting/sitting like this, making it difficult to see the mantle colour and wing details.

1A November 2014, Greater Rann of Kachchh, Gujarat. Same bird as in **1**. Now note how the mantle and wings are clearly seen, and mantle is darker greyish.

In general, birds (n=15) seen in DNP **[2, 2A, 3]** were pale greyish, with a paler rump. In Gujarat, they (n>25) varied from pale grey to dark smoky-grey.

Photos: Prasad Gampule

2. February 2014. Desert National Park, Rajasthan. Very pale plumage, finer mask and extensive white in wings. Note large primary patch and white secondaries.

2A. February 2014. Desert National Park, Rajasthan. Same individual as above in flight. Note the extensive white on the upperwings, showing wing pattern as illustrated in Fig. 4

Photos: Prasad Ganpule

3. February 2014. Desert National Park, Rajasthan. Note the extensive white in the primaries and secondaries. Also primary projection looks much longer (more than 100%) than generally seen in *lahtora*. Pale plumage and narrower face mask.

Face pattern, and bill: Facial masks vary. Two extreme face patterns are illustrated here. The palest birds, with pale, greyish-white heads (Fig 1), show a facial mask that passes over the lores, eyes, and behind the eyes, ending at the ear coverts. The black on the lores, and forehead is restricted. The darkest birds, with a dark smoky-grey head, and mantle (Fig. 2), could show a very prominent black facial mask, almost like that of a Lesser Grey Shrike *L. minor* **[4]**, with a wider-than-normal facial mask on the forehead, lores, and through the eye, extending down towards the neck. Such dark, smoky-grey plumaged birds can be seen in Rajasthan **[5]**, and also in Gujarat. Most birds show a facial pattern that is between these two extremes. Though posture, and how position of neck (whether stretched, or not) may affect the extent of black seen behind, and above the eye, it is apparent that this is variable, with some birds showing a wider facial mask. This feature can be judged by the width of the black band over the bill (forehead), and above the eyes, when good views are obtained. Though rare, this is especially noticeable in some individuals that sport a wider facial mask. There is a faint white supercilium present on many birds, which, even if present, is not noticeable unless closely observed. The bill is heavy and black in all adult birds.

Fig. 1. Shrike head, pale.

Art: Prasad Ganpule

Fig. 2. Shrike head, dark.

4. November 2014. Greater Rann of Kachchh, Gujarat. Note very wide and extensive mask extending well above the eye, darker grayish plumage, and much white in secondaries.

Photo: R.S.Tomar

5. October 2014, Kota, Rajasthan. Note the dark smoky grey plumage, faint supercilium above eye and amount of white in wings. This bird is in moult, with outer tail feathers still growing.

Wings: The upper-wing pattern, when seen in flight, is considered important for identification, and special attention was paid to it, and whenever possible, it was photographed. Shrikes sometimes hold the inner wing semi-closed in flight, which makes it difficult to observe the pattern on the secondaries, and only a black patch is visible. But as far as possible, I tried to observe the fully stretched upper-wing in detail. I noted three types of wing patterns on *lahtora* (Figs. 3–5[2]):

Fig. 3. Wing pattern of Great Grey Shrike–type 'a'.

Art: Prasad Ganpule

Fig. 4. Wing pattern of Great Grey Shrike–type 'b'.

2. Note that in all wing illustrations, the mantle, and scapulars are not illustrated; they may vary, with scapulars showing different amount of white, and mantle colour also may vary. Only the wings are illustrated, mainly to show the pattern on the primaries and the secondaries, which is a critical feature for identification.

Fig. 5. Wing pattern of Great Grey Shrike–type 'c'.

a) The most common pattern (type 'a'; Fig. 3) is where wings are black, with a white patch on the primaries. The first (innermost) primary 'p1', mainly, is wholly white, but this is variable. The secondaries have white outer webs, with the first secondary (s1) extensively black, and showing a little bit of white, thus creating a 'step' between the white on the primaries and the secondaries. If the first primary (p1) is wholly white, then this 'step' looks more prominent. The other secondaries are whiter, with less black **[6]**.

Photo: Swadeepsinh Jadeja

6. December 2010. Jamnagar, Gujarat. Note wing pattern. This is the typical type of wing pattern shown by majority of *lahtora* here, as shown in Fig 3. Primary patch is small, (s1) is extensively black and creates a 'step'.

b) The pattern (type 'b') shown in Fig. 4 was noted mainly in the birds seen in the DNP, wherein the white primary patch is more extensive and wider, and the secondaries also show extensive white, thus creating a large, continuous white band. The primary patch reaches till the tips of 'p1', which is wholly white in many birds. This wing pattern is also seen on birds in other desert areas in Rajasthan. In such birds, 's1' shows minimal black, as a result of which the 'step', shown in Fig 3, is much reduced, and other secondary feathers show more white. The overall effect is of extensive white in the wings.

c) In the rarer (n=3), third type of pattern (type 'c'; Fig. 5), the white primary patch is smaller, and the secondaries are extensively black. The outer webs show very little white, but the distal ends are white. In this pattern, the wings look more blackish, with the secondaries being blackish at their base. The white on the secondaries is only seen when the wing is fully stretched.

The closed wings are black with a small white primary patch visible, which is present at the base of outer primaries. The secondaries show extensive white tips on closed wings in most birds, with a secondary patch sometimes visible. Birds moulting from juvenile into adult plumage show a mix of juvenile and adult feathers in the secondaries **[7]**.

Photo: Klaus Malling Olsen

7. February 2006. Rajasthan. Note wing pattern. The secondaries (s1-s4) are juvenile and brownish in colour, while remaining secondaries are black. A typical 2cy *lahtora* , with the wings moulting.

Tail: The spread tail is very difficult to observe when in flight but it was observed for a few individuals ($n < 5$). The outermost tail feather (t6) is wholly white except for a small black line/ patch on the rachis. The next feather (t5) is also predominantly white, though the black on the rachis is slightly more extensive. However 't6' and 't5' usually show some amount of black on the rachis. The central tail feathers are wholly black.

Identification & status

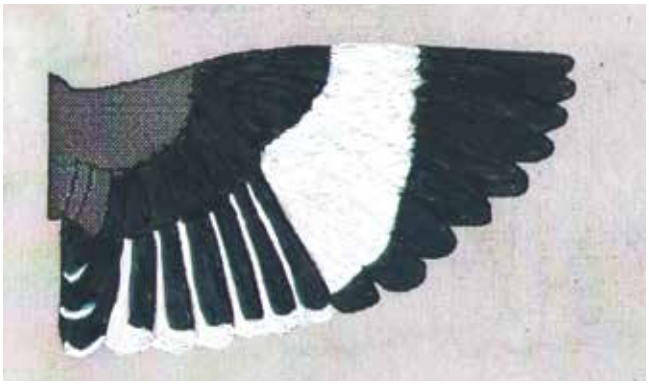
Features of *lahtora* are described above. However, separation of *lahtora* from *pallidirostris*, *homeyeri*, and *aucheri* is difficult, and good views are required to separate them. While there has been much research on field identification of *pallidirostris* from the grey shrikes occurring in Europe, field identification with respect to *lahtora* is not very well understood. Hence, details for separating *lahtora* from *pallidirostris*, *homeyeri*, *aucheri*, and *minor* are given below. These are mainly based upon work by Lefranc & Worfolk (1997), Ali & Ripley (2001), Yosef & ISWG (2008), van Duivendijk (2011), and Rasmussen & Anderton (2012), and are supplemented by my observations of *lahotra*, and *pallidirostris* over the past few years. There are minor differences in the criteria for identification in the works mentioned above, but I have collated these below; all descriptions pertain to adult birds.

Lanius excubitor pallidirostris

In general, pale greyish / whitish (pallid). The bill is usually pale, and the black facial mask restricted till the eye. The lores are pale, or at most greyish, and not prominent, but can be narrowly black in some adults (males?). The primary patch is wide (reaching to the tips of inner primaries), and prominent in flight, while the primary projection is much longer than in *lahtora* (about 80% of tertials), with five–seven primaries extending beyond the tertials. The upper-wing pattern is also very similar to that of *lahtora*, but with much more black in the secondaries. This could be variable as a few individuals (in the UAE, and presumed to be *pallidirostris*) show quite obvious white edges on the secondaries, which can give the effect of extensive white across the whole inner wing when the bird is in flight **[8]**—but this is uncommon (Oscar Campbell, *in litt*., e-mail dated 01 December 2015). However, the inner edges of the secondaries are white, which is seen when the wings are fully stretched. Wing pattern of *pallidirostris* is illustrated in Fig. 6. The under parts, usually, have a pinkish wash. The two outer rectrices are usually white. Adult birds are usually pale-billed in autumn but may have black bills in spring / summer. Typical birds are fairly easy to identify if these features are present.

Photo: Nick Moran

8. December 2008. Lulu Island, Abu Dhabi, UAE. Note wing pattern, with significant amount of white in the secondaries. This pattern of more white on the secondaries is rare in *pallidirostris*, but such individuals have been noted in the UAE.



Art: Prasad Ganpule

Fig. 6. Wing pattern of Great Grey Shrike *L. e. pallidirostris*.

Tenovuo & Varrela (1998) show only a small white patch on primaries, but do not show any white on secondaries; van Duivendijk (2011) too states that it has no white on the secondaries, which seems erroneous. Rasmussen & Anderton (2012) state that it has 'little white in wing', and that is how it is even in Ali & Ripley (2001). As explained above, the primary patch is wide, the inner edges of the secondaries are also white, and are seen when the wings are fully stretched **[9]**. Why some individuals show more white across the secondaries, needs detailed study.

While the authorities cited above cover most identification details, of particular interest are some adult *pallidirostris*, which are surprisingly similar to *lahtora*. Adult *pallidirostris* show dark lores, and dark bills. Such birds have been noted in the western, and eastern part of their range. Tenovuo & Varrela (1998), quoting Cramp & Simmons (1993), state that half of the 30-odd *pallidirostris* skins in the Natural History Museum, UK, have dark lores. In photos of four museum specimens of *pallidirostris* from Sweden, there is a specimen with dark lores, and a dark bill (Cederroth 2009). Adult birds in summer are said to have a black bill, and lores, and probably first summer birds do too (van Duivendijk 2011). Such individuals are seen mainly in spring in

the UAE, and it is not known if they also occur there in winter. However, not all spring *pallidirostris* show dark lores, but there are some that do (please see images on the website https://www.smugmug.com/gallery/n-xTxNK/ for such birds from the UAE). Most individuals seen in India, in winter, are pale-billed, but some may show dark lores **[10]**. These types of dark-billed, and dark-lored individuals are not illustrated either in Grimmett *et al.* (2011), or in Rasmussen & Anderton (2012). Photos of such birds from Bahrain, and Mongolia are given here **[9, 11, 12]**, and are also posted on many birding websites, especially those originating from Kazakhstan. Thus it is quite possible that such birds may occur in north-western India as migrants. In such cases, separation from *lahtora* is tough, and based mostly on the longer primary projection, the larger white primary patch, and the pinkish wash to the under parts (if present). Care has to be taken in separating such individuals from *lahtora*, and some birds may not be safely separable in the field without detailed views of their primary projection, and wing pattern. As seen from Fig. 6, even its wing pattern is somewhat similar to wing pattern of *lahtora* (compare with Fig. 3), and it would be truly difficult to separate such individuals with certainty. This aspect of identification of *pallidirostris* from *lahtora* has been largely ignored in the reference texts with respect to India and needs further study.

Photo: Antero Lindholm

9. March 2000. Bahrain. Same bird as in Image 11. Note wing pattern, and its similarity to *lahtora*, but wider primary patch and less white on secondaries.

Photo: Jaysukh Parekh

10. January 2014. Greater Rann of Kachchh, Gujarat. Note the white supercilium above the black mask in front of eye meeting over the bill, which is very unlike *lahtora*. Note paler bill and lores, wide primary patch like *pallidirostris* but primary projection looks much shorter than usually seen. Since wing and tail pattern was not noted, this individual is best kept unidentified, but is probably an adult *pallidirostris*, in spite of the unusually short primary projection.

Photo: Antero Lindholm

11. March 2000. Bahrain. Note the dark lores and bill. These types of birds are extremely similar to *lahtora* but note the long primary projection and wider primary patch, smaller bill.

Photo: Hannu Hattinen

12. April 2014. Gobi Desert, Mongolia. Note dark lores, black bill (a feature seen in summer?). Note extreme similarity to *lahtora*. If such birds winter in India, it would be difficult to identify them or would be overlooked as *lahtora*. But note lack of mask on forehead, longer primary projection, wider primary patch, supercilium behind eye and larger white scapulars. This individual has a broader mask than normal.

Status: *Pallidirostris* ranges from Central Asia from NW Caspian Sea (extreme S Russia) and South Kazakhstan east to Mongolia and north China and, in west, south to NE Iran, Afghanistan, north Pakistan and western foothills of Tien Shan Mountains; some populations are migratory and they winter in northern Africa and in small numbers in Arabia (Yosef & ISWG 2008). It is said to straggle to India (Lefranc & Worfolk 1997), while Harris & Franklin (2000) note that it rarely migrates to NW India. Rasmussen & Anderton (2012) state it is seen 'more widely in the north-west in winter'.

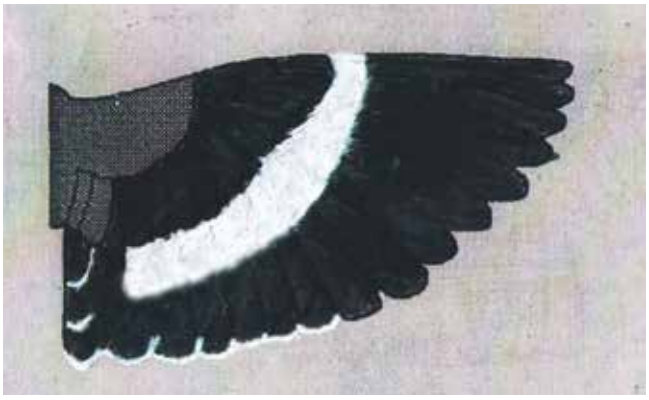
There is an isolated record from eastern Rajasthan (Grimmett *et al.* 2011). It has been recorded in GRK, and in LRK in Gujarat. I have observed at least five individuals during the winters of 2013, and 2014 in LRK **[13]**. In GRK it is rare, but is regularly seen, and photographed (http://orientalbirdimages.org; Jugal Tiwari, *verbally*). It could be a regular winter migrant to north-western India, and further surveys are needed to know its status here. Birds with dark lores, and dark bills could easily be overlooked among *lahtora* seen here, and special attention should be given when identifying *lahtora / pallidirostris* in the arid-, and desert areas of north-western India in winter.

Photo: Prasad Ganpule

13. January 2015. Little Rann of Kachchh, Gujarat. Note the pale bill and lores, with a hint of pale supercilium behind eye. The underparts are distinctly washed with pink, which is noticeable in the field also. Long primary projection. Pale grey upperparts. This bird is typical of *pallidirostris* seen here.

Lanius excubitor homeyeri

Has pale grey upper parts, and white under parts. Usually, a narrow white supercilium is present. Mask is narrow. Rump is pale / white. The upper-wing pattern is different, and shows much white in wing. The basal half of secondaries is white and connected to the primary patch, creating a white wing panel on the entire upper-wing. Though the size of this patch may vary, the white bases to the secondaries are distinctive, and the white wing panel is diagnostic and important for identification (Fig. 7). The tail also shows much white, with two outer tail feathers being completely white, and the central tail feathers having a white base.



Art: Prasad Ganpule

Fig. 7. Wing pattern of Great Grey Shrike *L. e. homeyeri*.

Though it is unlikely to be confused with *lahtora*, some pale *lahtora* may be similar to *homeyeri*. In such cases, the different face-, and wing- patterns separate the two. The main confusion here is its similarity to *pallidirostris*. So the different wing pattern, supercilium above the black facial mask, etc., are useful in separating the two.

Status: It breeds in Southeast Europe (East Balkans, Bulgaria, South Romania, from Ukraine, East to foothills of Southern Urals), and Southwest Siberia (East to North foothills of Altai, including Naryn region); non-breeding to Southwest & Central Asia (Yosef & ISWG 2008). Birds of the race *homeyeri* are said to go as far south as northern Iran and up to the Pamir foothills in winter (Lefranc & Worfolk 1997).

Homeyeri is a vagrant to India, with a record from Kashmir (Ali & Ripley 2001). Rasmussen & Anderton (2012) report it as a very rare straggler. Ali & Ripley (2001) discuss specimens from Quetta, and Gilgit (Pakistan), and Avantipur near Srinagar (India), with the comment that the birds from Gilgit were 'possibly quite correctly' identified as *homeyeri* despite it being treated as *leucopterus* (a synonym of *homeyeri*) by Charles Vaurie. Srinagar birds' identification is not discussed but it is attributed to Frank Ludlow. It is possible that *homeyeri* is overlooked, and detailed scrutiny of all grey shrikes is required to learn more about its status here; it could occur as a vagrant in areas in extreme northern India.

Lanius excubitor aucheri

Has uniform grey upper parts that do not get paler on the rump. Facial mask narrower, but head pattern similar to *lahtora*. Under parts have a distinct greyish wash. The upper-wing has a white primary patch, and almost no white on the secondaries; some birds have dark brownish secondaries. The wing pattern is said to be variable (Ali & Ripley 2001). It generally has much less white in wings and tail than do *lahtora*, *homeyeri*, or *pallidirostris* (Fig. 8). I have shown the inner edges of the secondaries white, but these may be fainter, or even black. Ali & Ripley (2001) state 'inner edge of inner web of secondaries usually white, rest brown but this is rather variable'. But generally there is almost no white on the secondaries, with the secondaries either black, or dark brownish. The outermost rectrice (t6) is mostly white with black on base / rachis, while the next feather (t5) is mainly black with a white tip, which differs from the other taxa discussed here.

Fig. 8. Wing pattern of Great Grey Shrike *L. e. aucheri.*

It is similar to *lahtora* and care is needed to separate it. Lefranc & Worfolk (1997) note that *aucheri* may intergrade with *lahtora* in western Pakistan. It is possible that such birds may occur in India, and good views / photographs are needed to identify it to sub-specific level. However, the greyish wash to the under parts is usually obvious on all adults, and the different wing pattern would separate it from *lahtora*. The wings, and tail, if seen well, would show much less white than *lahtora*, and along with the greyish under parts would be the best features for identification.

Status: It ranges from Central-eastern Sudan (south from Port Sudan), Eritrea, North Ethiopia, North-western Somalia, Iraq, Southern Iran, Syria, Southeastern Israel, Southeastern Sinai Peninsula, West Arabian Peninsula and Oman (Yosef & ISWG 2008).

Aucheri is a vagrant to the Indian Subcontinent, with a

Photo: Klaus Malling Olsen

14. February 2006. Desert National Park, Rajasthan. Note the grey upperparts and rump, grayish wash to the underparts, especially flanks, which is like *aucheri*. But note face pattern, which is similar to *lahtora* and unlike *aucheri*. An *aucheri* or a probable *lahtora-aucheri* intergrade ? This individual is very different from the birds generally seen in the area.

specimen collected from Bhawalpur, Punjab, in Pakistan (Abdulali 1977). It has not been recorded in India but careful observations of grey shrikes in north-western India may get results. A probable *aucheri*, or an intergrade, has been photographed in the Desert National Park, Rajasthan **[14]**, and a specimen is discussed by Abdulali (1977), which is similar to *lahtora*, except for a greyish wash to the under parts. Hence intergrades may occur here and more observations are required.

Lanius minor

Distinctive. Mainly males have extensive black on the forehead. Under parts are pink, or washed with pink, in males, and are less pink in females. Wing pattern is also different, with white primary patch, and all-black secondaries with white tips. Primary projection is long, and is diagnostic for identification. The tail is short and square. Females are similar, but with a fainter wash on under parts, and with brown mixed on forehead.

Adult *L. minor* is distinctive, different from *lahtora*, and is fairly easy to identify in the field—unlikely to be confused with *pallidirostris, homeyeri*, or *aucheri*. The long primary projection, rather short tail, and the different shape in flight contribute to its distinctiveness.

Status: It breeds from Europe to Central Asia, and winters in sub-Saharan Africa (Rasmussen & Anderton 2012). It is a vagrant to India, with two records from Ladakh (Delany *et al.* 2014) being the first for the country.

Discussion

The distribution range of *lahtora* extends from Pakistan eastwards till Bihar, and from the Himalayan foothills in the north till about southern Karnataka. This is a large area with varied habitat, and hence some variation in *lahtora*, due to geographical factors, is to be expected. Yet a majority of the birds seen here are lighter than those illustrated in Lefranc & Worfolk (1997), Grimmett *et al.* (2011), and Rasmussen & Anderton (2012)—all showing *lahtora* with darker smoky grey plumage. These authorities do not describe any variation for *lahtora*.

Abdulali (1977) stated, 'There is some variation in the shades of grey on the upperparts but this appears to be individual', and described a specimen from Jalandhar [=Jullunder], Punjab as the palest. Also, some birds look darker during the monsoon (their breeding season). This could be due to their fresh plumage. In winter, though some individuals retain this dark plumage, most birds do not look dark, but pale grey. Whether this is age-related, or due to some other factors, is not known, but plumage is variable. The palest birds were observed in DNP, Rajasthan, and sometimes in LRK, Gujarat **[15]**, while the dark birds were seen in many areas in Saurashtra, Gujarat. This occurrence is random as many times birds with variable plumage / face pattern could be seen in the same area, e.g., in GRK, it is possible to see, in a single day, birds with pale, as well as dark plumages. Certainly *lahtora* is not always dark smoky-grey as illustrated; most birds are pale grey, or even whitish grey.

Photo: Prasad Gampule

15. December 2013. Little Rann of Kachchh, Gujarat. Note pale grey plumage, face pattern and long tail. Small primary patch and white secondary tips. This individual was very large in size.

The difference in wing pattern has not been described in the reference texts. They give unsatisfactory descriptions: Ali & Ripley (2001) state, 'wings black with pure white patch or "mirror" which flashes conspicuously in flight'; Rasmussen & Anderton (2012), 'black wing with large white carpal patch and edges on secondaries'; Lefranc & Worfolk (1997) 'outer web of secondaries with much white, inner webs wholly white'. Grimmett *et al.* (1998) describe the wings in some detail, 'has extensive white patch at base of primaries and, with inner webs of secondaries and tips of outer webs also largely white, shows much white in wing at rest and in flight', but do not describe any variation.

For tail pattern, though outer pair of rectrices are extensively white, there is some black present on the rachis, which is more noticeable on the second feather (t5). This is contra Lefranc & Workfolk (1997), who state that the outer pair of retrices is wholly white in *lahtora*. Panov (2011: Fig. 1.7a) illustrates a museum specimen of *lahtora*, similar to **[16]**.

In addition to other identification characteristics, the upper-wing pattern in the grey shrike complex is considered to be critical for identification; especially for separating similar looking *pallidirostris* and *homeyeri*, and *lahtora* and *aucheri*. Hence this variation in wing pattern observed in *lahtora* needs to be studied further, possibly with a wide-array of museum skins.

Birds seen in the DNP, Rajasthan have consistently paler plumage, narrower facial mask, more white in the wings, and longer primary projection than birds seen elsewhere. These characteristics are far too consistent to be attributed to individual

variations. This may be due to environmental factors. However, this variation does not seem clinal as birds with pale, as well as dark, plumage, and with variable facial masks were observed in Gujarat. But it is apparent that the birds seen in the DNP area are consistently different from *lahtora* seen elsewhere, and may represent a gradual cline, with paler birds occurring in the extreme west. Individual variation alone cannot explain the different wing patterns observed in the birds. It is possible that after further study, this variation might be formally recognised, as it is diagnostically different. The birds seen in the DNP area in Rajasthan certainly deserve further morphological, and molecular study.

Photo: Tom Lindroos

16. January 2013. Ranthambhor, Rajasthan. A stunning flight image. Note pale plumage, wing pattern and tail pattern. This bird shows a wing pattern, which is a little different from that illustrated in Fig. 3, with slightly more white in the inner secondaries.

There is still a lot to understand about the grey shrike complex in the Indian Subcontinent. For example, birds occurring in the area where the ranges of *aucheri, pallidirostris*, and *lahtora* overlap are populations in which intergrades occur (Fig. 3; Panov & Bannikova 2010). The areas where the potential overlap of these subspecies occurs is close to the Indian Subcontinent, and hence intergrades from these areas could occur as winter migrants in north-western India, especially in Rajasthan. It is further possible that *lahtora* is a local migrant, dispersing short distances in winter, towards western Pakistan, and further west, to south-eastern Iran (OSME 2014).

It is possible that in the extreme eastern, and southern part of its range, *lahtora* may show some variation from what is described here. I have seen images of *lahtora* from Karnataka, Maharashtra, and northern India carefully, but I could not find any major differences in them. But this is difficult to ascertain from photographs. A study of individuals in the field, and museum skins from these areas, are required for a comprehensive analysis. I have not studied if the vocalisations of different *lahtora* populations vary. This aspect has probably not been studied earlier, and a detailed study of calls and songs of birds from different areas will be helpful in understanding if there are any differences.

It is not known if adult *pallidirostris* with dark lores, and black bill occur regularly in north-western India; birdwatchers should look out for them. If sightings of *aucheri* and *homeyeri* are documented in the future, then their status in India will have to be revisited.

Molecular studies on the grey shrike complex, though done in Europe, have not been carried out on a large scale in India. DNA analysis done on specimens from different areas / regions in India will be helpful in understanding if there is any divergence in the populations here. A special study should be carried out on the population of *lahtora* in DNP area in Rajasthan, with an emphasis on breeding pairs to study their morphology, vocalizations, and DNA, as these birds are different from *lahtora* found in other areas.

Finally a note of caution: though *lahtora* is still regularly seen in some places in Gujarat and Rajasthan, e.g., GRK and DNP, it seems that its population is decreasing. Ali (1955) noted it as 'common' in Gujarat. However during my study, it was not at all commonly seen in the Saurashtra region, even in areas of suitable habitat. In areas where it is resident in Gujarat, only three to four individuals could be seen in a whole day. This decrease in population has been reported earlier (Khacher 1996). It is not persecuted, but its habitat may be shrinking due to human pressures, making an impact on food availability, and it is possible that it may be declining further. A population estimation of Great Grey Shrike is needed so that an idea regarding its current status can be obtained, and a plan for its conservation can be worked out if a marked population decrease is seen.

Conclusion

The Great Grey Shrike complex in India represents a challenge in identification and taxonomy that requires detailed morphological and molecular study. From this preliminary study, it is evident that there is considerable variation in its general plumage, face pattern, and wing colouration of the resident Great Grey Shrike of the north-western India. This needs to be taken into account while identifying this bird vis-à-vis the three other migrant / vagrant races. Systematic genetic sampling across the range of *lahtora* might throw up interesting results that may explain some of these observed plumage patterns.

Acknowledgements

I thank Antero Lindholm, Hannu Hattinen, Jaysukh Parekh, Klaus Malling Olsen, Nick Moran, Swadeepsinh Jadeja, Tom Lindroos, and R. S. Tomar for contributing photos. I thank Antero Topp, and Maulik Varu for helping with the references, and Jugal Tiwari for information. I also thank Martin Garner, Brian J. Small, Graham Walbridge, Lars Svensson, and Krys Kazmierczak for their help.

References

Abdulali, H., 1977. A catalogue of the birds in the collection of the Bombay Natural History Society-20. Laniidae, Oriolidae, Dicruridae, Artamidae. *Journal of the Bombay Natural History Society* 73 (3): 491–515 (1976).

Ali, S., & Ripley, S. D., 2001. *Handbook of the birds of India and Pakistan together with those of Bangladesh, Nepal, Bhutan and Sri Lanka.* 2 ed. Delhi.: (Sponsored by Bombay Natural History Society.) Oxford University Press [Oxford India Paperbacks.]. Vol. 5 (Larks to Grey Hypocolius) of 10 vols. Pp. 2 ll., pp. i–xvi, 1–278 + 1 l., 2 ll.

Ali, S., 1955. The birds of Gujarat. Part II. *Journal of the Bombay Natural History Society* 52 (4): 735–802.

Cederroth, C., 2009. Website: http://dagbok.segerstadsfyr.se/#home.14. [In Swedish; Accessed on 25 January 2015.]

Clements, J. F., Schulenberg, T. S., Iliff, M. J., Roberson, D., Fredericks, T. A., Sullivan, B. L., & Wood, C. L., 2015. The eBird/Clements checklist of birds of the world: v2015. Website: http://www.birds.cornell.edu/clementschecklist/download/. [Accessed on 29 November 2015.]

Cramp, S., & Simmons, K. E. L., 1993. *The birds of the Western Palearctic.* Vol. VII. Pp. 482–523. Oxford University Press. UK.

Delany, S., Garbutt, D., Williams, C., Sulston, C., Norton, J., & Denby, C., 2014. The Southampton University Ladakh Expeditions 1976–1982: Full details of nine species previously unrecorded in India and four second records. *Indian BIRDS* 9 (1): 1–13.

Dickinson, E. C., & Christidis, L., (eds.) 2014. *The Howard and Moore complete checklist of the birds of the world: 2. Passerines.* Eastbourne, UK: Aves Press. Vol. 2 of 2 vols.: Pp. i–lii, 1–752.

Grimmett, R., Inskipp, C., & Inskipp, T., 2011. *Birds of the Indian Subcontinent.* 2nd ed. London: Oxford University Press & Christopher Helm. Pp. 1–528.

Grimmett, R., Inskipp, C., & Inskipp, T., 1998. *Birds of the Indian Subcontinent.* 1st ed. London: Christopher Helm, A & C Black. Pp. 1–888.

Harris, T. R., & Franklin, K., 2000. *Shrikes and Bush-shrikes including wood-shrikes, helmet-shrikes, flycatcher-shrikes, philentomas, batises and wattle-eyes.* London: Christopher Helm. Pp. 1–392.

Kazmierczak, K., 2000. *A field guide to the birds of India, Sri Lanka, Pakistan, Nepal, Bhutan, Bangladesh and the Maldives.* 1st ed. London: Pica Press / Christopher Helm. Pp. 1–352.

Khacher, L., 1996. The birds of Gujarat - a Salim Ali centenary year overview. *Journal of the Bombay Natural History Society* 93 (3): 331–373.

Lefranc, N., 1997. *Shrikes. A guide to the shrikes of the world.* 1st ed. New Haven; London: Yale University Press; Pica Press. Pp. 1–192.

Olsson, U., Alström, P., Svensson, L., Aliabadian, M., & Sundberg, P., 2010. The *Lanius excubitor* (Aves, Passeriformes) conundrum–taxonomic dilemma when molecular and non-molecular data tell different stories. *Molecular Phylogenetics and Evolution* 55 (2): 347–357.

OSME. 2014.The Ornithological Society of the Middle East, the Caucasus and Central Asia. Website: http://osme.org/sites/default/files/pdf/ORL_v3.0_Part_C_Passerines_2014.pdf. [Accessed on 20 January 2015.]

OSME. 2015. Website: http://osme.org/sites/default/files/pdf/SIMPLIFIED_ORL_2015_3.1.pdf. [Accessed on 01 November 2015.]

Panov, E. N., & Bannikova, A. A., 2010. On the validity of the 'Steppe Grey Shrike' as an independent species. *Sandgrouse* 32 (2): 141–146.

Panov, E. N., 2011. *The true shrikes (Laniidae) of the world: Ecology, behavior and evolution.* Pensoft Publishers. Moscow.

Rasmussen, P. C., & Anderton, J. C., 2012. *Birds of South Asia: the Ripley guide.* 2nd ed. Washington, D.C. and Barcelona: Smithsonian Institution and Lynx Edicions. 2 vols. Pp. 1–378; 1–683.

Tenovuo, J., & Varrela, J., 1998. Identification of the Great Grey Shrike complex in Europe. *Alula* 4 (1): 4–11.

van den Berg, A., 2015. Website: http://www.dutchbirding.nl/content/page/files/DBupdateWPchecklistArnoud20150815.pdf. [Accessed on 01 November 2015.]

van Duivendijk, N., 2011. *Advanced bird ID handbook: The Western Palearctic*. London: New Holland. Pp. 1–416.

Yosef, R., & International Shrike Working Group (ISWG). 2008. Southern Grey Shrike (*Lanius meridionalis*), Great Grey Shrike (Lanius excubitor). In: del Hoyo, J., Elliott, A., Sargatal, J., Christie, D. A., & de Juana, E., (eds.) 2014. *Handbook of the birds of the World Alive*. Lynx Edicions, Barcelona. (Retrieved from http://www.hbw.com/node/60482, 60483 on 20 January 2015).

Early Indian bird collectors: Jean Macé, collector during 1798–1803

Justin J. F. J. Jansen

Jansen, J. J. F. J., 2016. Early Indian bird collectors: Jean Macé, collector during 1798–1803. *Indian BIRDS* 11 (1): 10–12.
Justin J. F. J. Jansen, Naturalis Biodiversity Center, Leiden, P.O. Box 9517, 2300 RA Leiden, The Netherlands. E-mail: *justin.jansen@naturalis.nl*
Manuscript received on 21 November 2015.

While researching the exploits of the Baudin Expedition (1800–1804), captained by Nicolas Baudin, to Australia, Timor, Mauritius, Tenerife, and South Africa (1800–1804), and the history of the Muséum national d'Histoire naturelle, Paris, France (hereafter MNHN), I noticed the name of Jean Macé (Jansen 2014, 2015), who donated a number of birds from 'Bengale' [=Bengal] to the expedition. He had, earlier, also donated another batch of specimens to the MNHN. I here present my notes on the specimens, and a literature research, on Macé, and his collections.

Macé was elected as a member of the Society of the Histoire Naturelle in Paris, in 1790, and was asked to collected specimens, in foreign countries, by its board. Educated as doctor, Dr Jean Macé MD departed from The Netherlands, on board a vessel to Cape Town (South Africa) in 1789, and remained there up to 1792 (Anon. 1848: 81–83). He visited inland locations, including the Hottentots, made notes, and collected items of natural history. He then proceeded to Mauritius where he remained until 1798 (Millin *et al.* 1795). By 03 December 1793 he had accumulated a collection of 22 bird-species, including species of flamingo *Phoenicopterus*, tropicbird *Phaeton*, and others (La Bibliothèque centrale du Muséum national d'Histoire naturelle, Paris, France, letter 03 December 1793, dossier 52). His plans to visit Sri Lanka did not materialise, due to war, and it is unknown whether he visited Madagascar as initially planned (Millin *et al.* 1795). In 1798 he was at Tranquebar (Tharangambadi; 11.03ºN, 79.85ºE; Nagapattinam District, Tamil Nadu, India), Serampore (Sreerampur; 22.75°N, 88.34°E, Hooghly District, West Bengal, India; erstwhile Serampore) and Saharanpur (29.96°N 77.55°E, Saharanpur District, Uttar Pradesh, India) in January 1800 (Laissus 1981). He collected, or procured no less then 371 birds from around Danish-ruled Sreerampur (La Bibliothèque centrale du Muséum national d'Histoire naturelle, Paris, France, letter 03 December 1793, 07 January 1800, dossier 52). He tried to get back to France but the authorities did not let him. His collections, library, diaries, and notes on natural history, which he had left at Mauritius, were seized, and confiscated by rioters. However, the Sreerampur bird collection he made in India in 1800 was sent, via Copenhagen, Denmark, through the Danish merchant, Christian Wilhelm Duntzfeld, to France. His natural history collections, including birds, arrived in the Muséum national d'Histoire naturelle, Paris, France (hereafter MNHN) in the second half of 1801. It contained 358 birds (Manuscript dated 23 September 1801, in the Archives du labaratoire de zoologie (Mammifères et Oiseaux) du MNHN). This collection also contained purchased items from Madagascar (Geoffroy Saint-Hilaire 1803; Hill 1980). 135 birds, collected by Macé in