## The large and small gulls (Aves: Laridae) of Gujarat

Prasad Ganpule: C/o Parshuram Pottery Works, Opp. Nazarbaug, Morbi 363642. prasadganpule@gmail.com

Gujarat has a 1600 kms long coast, which is the longest of any state in India. Due to varied coastal habitats, good numbers of large and small gulls (Laridae) are seen here. Since the identification of some gulls is very difficult, and there are frequent taxonomic changes, there is some confusion regarding the gulls seen here. This is especially true regarding the 'large white-headed gulls' (Genus Larus) group. The 'large white-headed gulls' group refers to a complex of large gull species, which are challenging to identify and the taxonomic relationships within these species (and their subgroups) have been widely and vigorously debated and the authorities / reference texts do not agree on their taxonomic status even today. The taxonomy in this group is still in a state of flux and many DNA studies are being conducted by researchers in Europe and in other places. Interestingly, many times, the differences in morphological characteristics are not supported by DNA data. Due to this, there is no unanimity on the taxonomic treatment of these gulls and various authors follow different taxonomies. There are also a few other species of gulls (other than the 'large white-headed gulls') occurring here in Gujarat and in general, there is very less information regarding the gulls occurring in the state.

I present here details of the large and small gulls of Gujarat, along with notes on their status and distribution. Special attention is given to the large white-headed gulls group and the various taxa in this group are described in detail. Only adult plumages are described here as the identification of first-winter or immature gulls is very challenging and beyond the scope of this work.

#### The large white-headed gull group

The field identification of the large white-headed gulls is very challenging. The identification is dependent on the mantle colour, bill shape and size, state and timing of moult, amount of white on wing-tips etc. All these features need to be noted for positive identification and even then, some gulls remain unidentified.

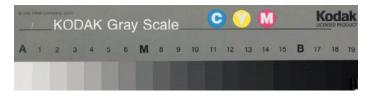
**Taxonomy:** There is much confusion regarding the taxonomy of large white-headed gulls. In addition to the changes in taxonomy, there have been changes in names too, thus making identification more confusing and complex. The taxonomy of large white-headed gulls is still unresolved. This is seen even in the recent reference texts for the two common large white-headed gull taxa seen in India – Heuglin's Gull is treated as *Larus heuglini* in Grimmett *et al.* (2011), while it is treated as *Larus fuscus heuglini* (a subspecies of Lesser Blackbacked Gull *Larus fuscus*) by Rasmussen & Anderton (2012). Similarly, Steppe Gull *Larus (heuglini) barabensis* is treated as

a subspecies of L. heuglini by Grimmett et al. (2011), while it is given as L. fuscus barabensis by Rasmussen & Anderton (2012); the latter authors treating both the common taxa occurring here in India as subspecies of Lesser Black-backed Gull. This taxonomy is based on the recommendations of Collinson et al. (2008), who conducted DNA studies on these taxa and recommended that Heuglin's Gull and Steppe Gull be treated as subspecies of Lesser Black-backed Gull. In the recent India checklist v3.0, both Heuglin's Gull and Steppe Gull are treated as subspecies of Lesser Black-backed Gull (Praveen et al. 2019). In Ali & Ripley (1981), pale mantled (with pale upperparts) gulls were assigned to L. argentatus and dark mantled (with dark upperparts) to L. fuscus. The names given in Ali & Ripley (1981) are also confusing; taxa occurring in India are referred to as 'Yellowlegged Herring Gull', 'Pinklegged Herring Gull' and 'Lesser Blackbacked Gull'. The names 'Yellowlegged Herring Gull' and 'Pinklegged Herring Gull' are no longer used for the two main taxa occurring in India as these are now referred to as either Lesser Black-backed Gull or Heuglin's Gull / Steppe Gull. Kazmierczak (2000) treated barabensis as a subspecies of Yellow-legged Gull (Larus cachinnans = Caspian Gull now) while Heuglin's Gull was treated as Larus heuglini, with two subspecies, heuglini and taimyrensis.

Here, the taxonomy I follow is slightly different from the recent reference texts as I have taken a more radical approach. The details of taxonomic treatment followed here are given in Table 1. While the taxonomy given here is debatable, this taxonomic view is taken by some authorities and I follow this taxonomy fully aware that many other taxonomies / authorities do not agree with this taxonomic treatment and it is likely to change in the future. For identification and description of adults, Malling Olsen & Larsson (2004) and Malling Olsen (2018) were used as the main references.

Some of the important features which need to be seen and noted for the identification of large white-headed gulls are as follows:

Judging mantle colour with Kodak grey scale: It is very important to judge the mantle colour in this group/taxa. For this, the 'Kodak grey scale' is a very useful tool. It is commonly used in gull identification. It is a luminance scale with 20, equally spaced increments (grey tones), or levels, between white and black, with 1 being white and 20 being black. It



is especially useful in the field as the human eye is good at making accurate tonal comparisons. By placing a grey scale card and using it to see which corresponding grey tone best fits the mantle colour, an accurate Kodak grey scale shade can be obtained. The tone can be then compared with the values of the Kodak grey scale. All gulls in the large white-headed group have been assigned a Kodak grey scale value(s) and the same can then be used to determine the taxon/taxa to which it fits the best. The Kodak grey scale values for taxa occurring in Gujarat are given here, which have been taken from Malling Olsen (2018). A 1-16 or 1-20 step Kodak grey scale can be obtained online from many different websites and one such scale can be obtained from http://www.gull-research.org/indexelements/charts.htm.

**Timing of moult:** The timing of moult in large white-headed gulls is very important and useful in identification. Generally, the more northerly a gull's breeding range, the less it moults following the breeding season (Malling Olsen 2018); the author states that long distance migrant gulls moult differently to short distance migrants with long distance migrants usually moulting in the winter quarters. For the common taxa occurring in India, the Steppe Gull moults earlier than the Heuglin's Gull, with moult usually completed (p10 – the outermost primary being fully grown) by mid-January (moult is usually completed by late January to mid-March in Heuglin's Gull). The state of the moult in mid-winter gives an indication whether the gull seen is a northerly breeder or not.

**Wing pattern:** When seen from below (and above) in flight (in a bird with completed moult or with all flight feathers present), the shape and size of the white mirror on p10 and p9 (if present) is important for identification. In addition to the white mirrors, wing-tip tongues and the amount of black in the primaries is also important and needs to be viewed carefully. In many cases, the open wings are critically important for identification.

**Taxonomic treatment of large white-headed gulls in Gujarat:** As explained earlier, the taxonomy in the large white-headed gull group is still unresolved. The taxonomic treatment of large white-headed gulls I follow is given in Table 1 along with their status in Gujarat.

The taxonomy followed here is taken from the references given in Table 1. It is pertinent to note that there is considerable debate regarding the taxonomic status of Heuglin's Gull and Steppe Gull. Malling Olsen (2018) treats the Heuglin's Gull as a distinct taxon, with two subspecies, the nominate *heuglini* and *taimyrensis*. The other common taxon observed in India, the Steppe Gull, is treated as a subspecies of Caspian Gull rather than as a subspecies of Lesser Blackbacked Gull by Malling Olsen (2018). Similarly, Mongolian Gull is sometimes treated as a subspecies of either Caspian Gull or Vega Gull (*Larus vegae*) or even as a distinct species *Larus mongolicus*. Detailed DNA studies are on-going and there will be some changes to the taxonomy of the large white-headed gulls in the future. Till then, the taxonomic treatment given in Table 1 is followed here.

Identification of large white-headed gulls from photographs: It is well known that judging mantle colour from photographs is often tricky as it depends on camera settings (exposure, brightness-contrast settings etc.), angle of sunlight falling on the bird, the position in which the bird is standing etc. Many times, a wrong camera setting can result in mantle colour being different in the photographs from what is seen in the bird, and could cause confusion. To get the accurate mantle colour in photographs, the gulls should be ideally photographed in good morning light (not very early morning or in the late morning), with proper exposure settings and by taking a good sample point. If possible, images of the upperwings and underwings should be obtained to see the wing pattern. Features like presence / absence of head streaking in mid-winter, bill size and shape, leg colour etc. are also important and need to be photographed. It is also necessary to point out that by mid-March to early April, most gulls start assuming breeding plumage and become whiteheaded. Thus, the presence / absence of head streaking is a feature which is useful only in mid-winter.

Of the following, first two gulls are the commonest large white-headed gulls seen here. A majority of the gulls seen in Gujarat will most probably be one of these two and thus both are described here in detail. The other gulls in this group are described along with their status in Gujarat.

Table 1: Taxonomic treatment and status of large white-headed gulls in Gujarat

Sr No	Common name	Scientific name	Reference used for taxonomy	Status in Gujarat
1	Heuglin's Gull	Larus heuglini	Malling Olsen (2018)	Common winter migrant
2	Steppe Gull	Larus fuscus barabensis	Rasmussen & Anderton (2012)	Common winter migrant
3	Caspian Gull	Larus cachinnans	Malling Olsen (2018)	Rare winter migrant
4	Taimyr Gull	Larus taimyrensis	Van Dijk <i>et al</i> . (2011)	Rare winter migrant
5	Mongolian Gull	Larus (vegae) mongolicus	Malling Olsen (2018)	Vagrant
6	Baltic Gull	Larus fuscus fuscus	Malling Olsen (2018)	Hypothetical

## Heuglin's Gull

In Gujarat, this is the gull with the darkest mantle (upperpart) colour (Kodak grey scale 8-13). It has a dark grey mantle with black wing tips and is normally the darkest gull here – clearly darker than either Steppe Gull or Caspian Gull. It is quite heavy billed and is usually heavily streaked on the nape in the winter, with some streaking also on the head. In flight, it has only a small white spot on the outermost primary (p10), and sometimes, a small spot on the next outermost primary (p9). The wings tips are thus extensively black. An arctic breeder, this is a late moulting gull and completes its moult by January to mid-March. Thus, in mid-winter, it is in moult, with the primaries still growing. After March, the moult is usually completed and the head becomes white as it starts acquiring breeding plumage.



Note dark grey upperparts contrasting with wing-tips. Strong bill. This individual is beginning to moult into breeding plumage but note few streaks on nape, with head white. April 2017, Mandvi Kachchh

Heuglin's Gull is a common winter migrant to Gujarat. It is seen in coastal areas of Kachchh and Saurashtra fairly commonly and is present in most coastal parts of the state. It is also seen around fishing villages and on beaches. It is frequently seen in large groups, especially in coastal fishing villages like Okha and around coastal areas of cities like Porbandar and Veraval.

## **Steppe Gull**

It has greyish upperparts (Kodak grey scale 7-8.5), which are paler grey than Heuglin's Gull. It has a relatively thinner bill and appears smaller than a Heuglin's Gull. It has very little or no head streaking in the winter, making the head appear white in most adults in mid-winter. It also has a rounded head shape, which is different from Heuglin's Gull. In winter, the bill is multi-coloured, with extensive black markings, red gonys and

greenish tinge. In flight, it is distinctive with extensive black in wings with white spot on p10, and frequently on p9. Black primary markings often reach p3 or p2. It is early moulting than Heuglin's Gull, with most birds completing their moult by December. A pale mantled gull in Gujarat with a white and rounded head (without streaking) in the winter will most probably be a Steppe Gull.



Note white head without streaking, rounded head shape and paler grey upperparts than Heuglin's Gull. Note slender and '4 coloured' bill. February 2016, Porbandar, Gujarat

Steppe Gull is also a common winter migrant to Gujarat. Its habits are similar to Heuglin's Gull and it is seen in coastal areas in the winter almost all over the state.

In addition to the two large white-headed gulls described here which are common, there are other taxa which occur in Gujarat, as either rare winter visitors or vagrants. However, the identification is many times extremely difficult and it is not possible to identify some individuals with certainty.

## Caspian Gull

This is a very pale mantled gull occurring here (Kodak grey scale 4-6.5). It has pale grey upperparts, which are much paler than Steppe Gull. It has a long, straight bill which is thinner, a 'pear-shaped' head with a sloping forehead, and a 'beady' eye (which is placed higher on the head). It is usually white headed in the winter though some individuals may show slight streaking on the nape. In flight, it has very less black in the wing tips, with large white mirrors on the two outermost primaries (p10 and p9), with long, grey 'tongues' on the outer primaries. These 'tongues' are grey areas on the primaries, which restrict the black in the wings to a small line. Hence, it is very distinct in flight. In India, it is thought that the eastern populations of Caspian Gulls are seen and these have more black in the wing-tips compared to the western populations. Even in these individuals, the wing-pattern is quite distinctive and it is possible to separate such birds from Steppe Gulls

if seen well. It is an early moulting Gull, with moult usually completed by October or early November.



Note very pale grey upperparts, slender and long bill. This individual had typical wing pattern of Caspian Gull with long grey 'tongues' on outer primaries and white mirrors on p10 and p9. January 2015, Little Rann of Kachchh.

The status of Caspian Gull in India is interesting. It was given as 'uncertain' in Grimmett *et al.* (2011) and as 'hypothetical' in Rasmussen & Anderton (2012). The Caspian Gull was included in the India checklist (Praveen *et al.* 2016) based on records from Gujarat (Ganpule 2015). Based on my personal observations, I have noted that the Caspian Gull is a rare winter migrant to Gujarat. It is noted in small numbers in Okha and in other areas of Gujarat – mainly in the coastal areas of Saurashtra and Kachchh. Some Caspian Gull-type individuals have also been noted in Nal Sarovar / Gosabara, near Porbandar, too (*pers. observation*). Thus, it can be said that the Caspian Gull is a rare winter migrant to Gujarat.

## **Taimyr Gull**

The Taimyr Gull has greyish upperparts (Kodak grey scale 6-9), which look pale grey and the mantle colour is paler then Heuglin's Gull but similar to Steppe Gull. In winter, it has more extensive head streaking than in Heuglin's Gull, which is densest and broadest on the hind-neck, but often covering the entire head as fine greyish-brown streaks (Malling Olsen 2018). The head is flatter and beak is dull yellow in the winter. It is a late moulting Gull, with moult completed by late February or March. In flight, it has a white mirror on p10 with mirror on p9 also present and white primary tips are generally broader than in Heuglin's Gull.

For Gujarat, the Taimy Gull is a rare but regular winter migrant, with sightings from Okha, near Dwarka, and also from Porbandar (Ganpule 2016a). It could be more widespread but is probably overlooked amongst flocks of Steppe Gulls and Heuglin's Gulls here.

There is some uncertainty regarding the taxonomic status of Taimyr Gull. This is discussed in detail in Ganpule (2016a),



Note grey upperparts with fine streaking on head; more prominent streaking on nape. This bird is moulting, with p8 being longest, in the second week of January, indicating its northern origin. Upperparts much paler than Heuglin's Gull and late moulting with heavy head streaking separates it from Steppe Gull. January 2014, Okha, Gujarat.

wherein Taimyr Gull was treated as a subspecies of the Lesser Black-backed Gull as per taxonomy followed in the India Checklist. Van Dijk et al. (2011) suggested that the Taimyr Gull represented a distinct population with a measurable degree of genetic differentiation. But, no new genetic data was presented to refute the recommendations of Collinson et al. (2008). I choose to follow the taxonomy as per van Dijk et al. (2011), treating the Taimyr Gull as a distinct taxon till more data is available.

## Mongolian Gull

The Mongolian Gull has pale grey upperparts (Kodak grey scale 5-6). It has a rounded or pear-shaped, smallish-looking head, with flat fore-crown and heavy, parallel-edged bill. It is a large and heavy gull, with large-chested, broad-necked and large-billed appearance. In flight, though wing pattern is somewhat variable, it usually has large white mirrors on p9-p10. The wing-tip is among the darkest of Asian taxa, with seven (ranging from six to nine) outermost primaries showing black. In winter, the head is white, with at most very faint, narrow dark streaks on hind-neck and sometimes on the crown. The bill is duller. More details about the Mongolian Gull can be obtained from Yésou (2001).

For Gujarat, the Mongolian Gull is thought to be a vagrant. There are photos of gulls attributable to this taxon from Jamnagar, Okha and Nal Sarovar. See photo by Kothalia (2011) on the OBI website and also given here, which shows an adult gull which was identified as a 'putative' Mongolian Gull by Klaus Malling Olsen. Another photo by R. B. Balar on the OBI



Note very pale grey upperparts, heavy and parallel-edged bill. Also note the bulky look with deep, broad chest. A 'putative' Mongolian Gull. Near Jamnagar, December 2011.

website from Nal Sarovar is also thought to be a probable Mongolian Gull. I have seen probable Mongolian Gull-type birds twice in Okha. However, in all these photos, it is almost impossible to confirm the identification without trapping and measuring the birds or by DNA analysis since the Mongolian Gull is quite similar to the eastern Caspian Gull. Since birds typical of Mongolian Gull (and different from typical Caspian Gulls) have been noted here, it can be considered to be a vagrant to Gujarat pending further study.

#### **Baltic Gull**

The Baltic Gull has velvety black upperparts, with at most only a very slight contrast with darker wing-tips (Kodak grey scale 13-17) or with upperparts the same colour as wings. It has much darker upperparts than Heuglin's Gull. It is a delicate-looking gull, and looks smaller than Heuglin's Gull with a smaller head, thinner bill and has longer wings and shorter legs. In winter, the head is only faintly streaked, with the streaking strongest on hindneck. In flight, it usually shows a small white mirror on p10 only while very few have it on p9. The eye is yellow, often with dark spotting. It is a late moulting gull, finishing moult in its winter quarters by March.



Note very dark, almost blackish upperparts, with slender bill and long hind parts. Upperparts are 'velvety' black with very less or no contrast with wing-tips, and overall, it has a 'streamlined' look. April 2018, Sweden.

The Baltic Gull is a long distance migrant, breeding in the Baltic Sea and wintering mainly in East Africa. A recent record of a Baltic Gull from Goa was the first record of this taxon from India (Williams & Gottschling 2018). Though no sighting has been reported from Gujarat yet, it is possible that it could be a vagrant here and is overlooked amongst Heuglin's Gulls. Bird watchers should be aware of the possibility of occurrence of Baltic Gull here and any gull with very dark or blackish upperparts, not contrasting with wing-tips, should be seen closely and photographed.

## Other gulls occurring in Gujarat

In addition to the large white-headed gulls described here, there are other species of gulls which occur in the state. The taxonomy of these gulls is not complicated, even though there have been minor changes in a few of these species. At the species level, these gulls are fairly stable and there have been no major changes in taxonomy of these gulls in the past few years. The details of these gulls are given in Table 2.

Table 2: Other gulls in Gujarat

Sr No	Common name	Scientific name	Status in Gujarat
1	Pallas's Gull	Ichthyaetus ichthyaetus	Common winter migrant
2	Black-headed Gull	Chroicocephalus ridibundus	Common winter migrant
3	Brown-headed Gull	Chroicocephalus brunnicephalus	Common winter migrant
4	Slender-billed Gull	Chroicocephalus genei	Resident and common winter migrant
5	Mew Gull	Larus canus	Vagrant
6	Little Gull	Hydrocoloeus minutus	Vagrant
7	Black-legged Kittiwake	Rissa tridactyla	Vagrant
8	Sooty Gull	Ichthyaetus hemprichii	Hypothetical

#### Pallas's Gull

Previously known as the Great Black-headed Gull (*Larus ichthyaetus*) (Ali & Ripley 1981), but now treated as *Ichthyaetus ichthyaetus*, it can be identified by its large size and black mask in breeding plumage. The bill is large and black tipped, while in breeding, white eye-crescents contrast with black hood. In non-breeding plumage, the black mask on the face is variable, and some adults are almost plain white, with black restricted to the ear coverts. It has pale grey upperparts (Kodak grey scale 4-5). In flight, black wing-tip pattern is distinct, with very less black in wings and white mirrors on p10 and p9.



Note the black eye-mask, multi-coloured bill and the pale upperparts. Both these gulls are moulting out of breeding plumage and the variation can be seen. October 2017, Little Rann of Kachchh.

Pallas's Gull is a common winter visitor to Gujarat, and fairly common in coastal areas as well as in inland water bodies. Most birders are familiar with the Pallas's Gull and so there are many records / photos from almost all parts of the state.

#### **Black-headed Gull**

Adult in breeding plumage has dark brown hood, finishing higher on hindneck than in cogeners. Upperparts are grey and bill is dark maroon, similar in colour to the head and



Note the dark ear-spot, with shading across head. The upperparts are pale grey. Note that the 'white flash' on the primaries is visible even when it is perched. The bill is dark red and slender. February 2016, Porbandar.

narrow white eye-crescents do not join at the rear of eye. In winter, head is white with dark ear-spot and variable dark bars/ shading across crown and neck; bill and legs are bright red. In flight, it has grey upperwing with white leading edge, black trailing edge to outerwing with 'white flash' on primaries and black on wing-tips (when seen from above).

The Black-headed Gull is a common winter migrant to Gujarat and seen all over the state in coastal areas as well as in inland lakes and rivers.

#### **Brown-headed Gull**

Adult in breeding plumage has grey upperparts, brown hood, broad white eye crescents and black-tipped dark red bill. In winter, it has white head with dark ear spot (which is usually



ısad Ganpule

Note the white head with dark ear spot, bright red and black-tipped bill. The outer-wing shows white mirrors on p10 and p9, which is different from Black-headed Gull and Slender-billed Gull. Also note white flash on outer primaries but with black wing-tip and mirrors. The bill is dark red with black tip. February 2016, Porbandar.

larger than in Black-headed Gull) and deep pink legs. In flight, it has black wing-tips with white mirrors on p9 and p10, secondaries and inner primaries are grey while outer primaries and their coverts are white. This wing pattern, with mirrors on p10 and p9 is different from Black-headed Gull and Slender-billed Gull and is helpful in identification of adult birds.

The Brown-headed Gull is a common winter migrant to Gujarat and seen all over the state in coastal areas as well as in inland lakes and rivers.

#### Slender-billed Gull

In breeding plumage, has white head, underbody (may show variable rosy tinge), coverts and tail. Upperparts are pale grey; whitish eyes (but can show darker spots in eyes – pers. observation), black bill and red orbital ring. In winter, head is white but may show faint ear spot, red to dark red bill, which is longer than in Black-headed Gull, and red (or yellowish) legs. In

flight, it has white outer primaries with dark trailing edge and underwing with darker primaries. It is similar to Black-headed Gull but has a different head shape, bill size and shape is also indicative while structurally, it is different.



Note the slender neck and long and slender bill, which is dark red. Note very faint dark ear spot. The upperparts arepale grey. Note that this individual has a slightly darker and pale yellowish eye. February 2015, near Morbi.

The Slender-billed Gull is resident and local migrant, as well as a winter visitor to Gujarat. It breeds in colonies near Charakla salt pans, Dwarka, in the summer. I have noted up to 100 nests in this area, usually in May. This is a regular breeding location for the species and nesting has been observed here each year for the past several years, with 80-100 nests observed in the area. (Maulik Varu, pers. comm.). It may be breeding in other suitable habitats in the state but further study is required as there have been no reports of breeding in other locations in Gujarat. In the winter, the Slender-billed Gull is rather widespread, and is seen in suitable locations almost all over the state.

#### Mew Gull

Also known as Common Gull, the subspecies of Mew Gull occurring in our region is L. c. heinei. It is a small gull with smoky grey upperparts (Kodak grey scale 4.5-9). The adult in breeding plumage has a slim, bright yellow bill and dark eyes which look large on head, yellow legs and white head. In winter, head and underparts are white, with variable streaking on hindneck. In flight, it has black wing-tips with broad white mirrors on p10 and p9 and has prominent white trailing edge to wing. Though similar to Black-legged Kittiwake, the wing-tip pattern is distinctive.

The Mew Gull is a vagrant to Gujarat. There have been a few records from the state in the winter; from Nava Bandar near Una in January 2006 (Malling Olsen 2019) and from Bhuj, Kachchh (Eaton 2013). Interestingly, Adriaens & Gibbins



Note the small and short bill, fine streaks on head with darker streaks on nape. The upperparts are plae grey. The hindparts are longish with white underbody. October 2015, Little Rann of Kachchh.

(2016) show a specimen of Mew Gull from western India, with the location on the map matching to Gujarat. The specimen is in the Natural History Museum, Tring (Peter Adriaens, in litt. by email). However, on checking the specimen, it was noted that it had been collected in Iraq, and not India, and the authors had made a mistake in attributing this specimen for India (Hein Van Grouw, in litt, email dated 8 August 2019).

I have seen and photographed a Mew Gull from Little Rann of Kachchh in October 2015. Though there was some doubt initially regarding the identification, it was confirmed as a Mew Gull by Klaus Malling Olsen and Kjeld Tommy Pedersen. Thus, three records of Mew Gull are known from Gujarat. As suggested in Malling Olsen (2019), the Mew Gull could be a regular winter visitor to Gujarat and needs to be looked out for in flocks of other gulls.

#### Little Gull

The Little Gull is the smallest gull to occur here, and is only just slightly larger than marsh terns (Chlidonias sp. like Whiskered Tern Chlidonias hybrida). The upperparts are pale grey (Kodak grey scale 4-5.5). In summer (breeding plumage), it has a black hood with bright red legs. In winter, the head is white with a dark cap and ear spot, and the legs are duller. In flight, the wing pattern is striking; dark grey to blackish underwing coverts, black underside of flight feathers and pale grey upperwing with a white trailing edge. It lacks any black on upper wings and thus, in flight, the alternating black underwing and grey upperwing is noticeable.

The Little Gull is a winter vagrant to Gujarat. There have been reports from coastal parts of Kachchh and Saurashtra (Ganpule 2016b). Most of the individuals seen here have been first-winter or immature individuals based on the descriptions



Note the dark ear covert spot with shading on head. The underwings are blackish and upperwings are grey, which present a striking contrast when in flight. Also note thin black bill and large dark eye. April 2017, Czech Republic.

provided. It is likely that in these plumages, it could be confused with the similar Black-legged Kittiwake. But, a few of the reports are likely to be correct and the Little Gull could be a rare vagrant to our region. However, there have been no photo records of the species from Gujarat so far. Bird watchers are urged to look for the Little Gull in the state.

## Black-legged Kittiwake

It is a medium sized gull, larger than the Little Gull. The upperparts are grey (Kodak grey scale 6-7), with the extreme wing-tip being entirely black (described as 'dipped-in-ink'), which looks striking against a pale background. The legs are



Note the thin and pale yellow bill, the dark ear cover spot and shading across nape. Note the dark 'dipped-in-ink' wing-tips (lacking any mirrors). March 2018, Japan.

quite short and the bill is thin and greenish-yellow. In breeding plumage, the head is entirely white while in non-breeding

(winter), a grey ear spot is seen and there is grey shading on the hindneck. In flight, the black wing-tips are striking and do not have any white 'mirrors'.

The Black-legged Kittiwake is a vagrant to Gujarat with only one record from Mandvi, Kachchh (Mehta 2018). This record was of an adult in non-breeding plumage, which was surprising as almost all previous records from India were of juvenile or immature birds. In juvenile plumage, it is quite similar to Little Gull and also Mew Gull. The identification is difficult and careful observation is needed to separate it from these species. It is possible that more intensive bird watching in the coastal areas of the state could result in further sightings of the Blacklegged Kittiwake in the future.

## **Sooty Gull**

The Sooty Gull is a dark plumaged gull, with blackish-brown hood and upper breast, white underparts and dark brown upperparts. The bill is long and yellow or greenish-yellow with black subterminal band and red tip. The legs are long and yellow, often showing a greenish tinge. In flight, the wings are dark with white trailing edge. The Sooty Gull is slightly paler in the winter but is rather similar all round the year.



Note the long bill with black and red tip, the dark brownish head and upperparts. The neck and breast are paler brown. The rest of the underparts are white. The eyelid is narrow and white above eye. Oman 2014.

For Gujarat, the status of Sooty Gull is interesting. In the latest Gujarat checklist, it was treated as hypothetical (Ganpule 2016b). There are no records from coastal areas of the state but a few records from the Arabian Sea, off the Kachchh coast, are known. Ali & Ripley (1981) state that though it is seen commonly in Karachi, Pakistan, which is quite near to Gujarat, surprisingly, there have been no reports from the Gujarat coast. The Sooty Gull winters in coastal areas of Pakistan, very near to the Gujarat. Thus, it is quite possible that the Sooty Gull could occur here in the state, especially in coastal areas of Kachchh, and needs to be looked out for.

ranco Baresi (Source: Wiki Commons

#### Discussion

Due to the frequent changes in names and taxonomy, and the general difficulty in identifying gulls in the large white-headed gull group, there has been less interest in watching gulls here in Gujarat. Bird watchers do not scan gull flocks in detail to check the odd looking gull. This has lead to a paucity of information regarding the various taxa wintering here. In the recent years in Gujarat, a detailed study of gulls in Okha was conducted by Buchheim (2006), wherein the author observed Heuglin's Gulls, Steppe Gulls and a few other gulls, which were left unidentified, but speculated to be belonging or attributable to taimyrensis, birulai or vegae. A study was conducted again in Okha on the presumed Taimyr Gulls and it was noted that in addition to the Taimyr Gulls, some gulls seen in Okha and described in Ganpule (2016a) were similar to Vega Gull or were likely to be Taimyr Gull x Vega Gull hybrid. But, Vega Gull is not known to winter in India and also, without genetic studies, it would be impossible to confirm and hence, were kept unidentified or attributed to Taimyr Gull. Further research can help in the identification of these gulls seen in Okha and described in Ganpule (2016a).

Other than these two papers, there have been no major studies on gulls conducted in Gujarat recently and there have been no publications in birding journals or magazines on the large white-headed gulls group here. Identification of single, out-of-range bird in the large white-headed gull group, of taxa which are not known to occur in India, would be very difficult if seen here. In this respect, I have seen a Heuglin's Gull-type bird near Dwarka, which was in adult plumage and had a completed moult in the first week of November and had pale eyes. The moult timing in this individual was almost three months earlier than a normal Heuglin's Gull. The moult timing and plumage would fit a Lesser Blackbacked Gull of the subspecies graellsii/intermedius. Based on the location, it was identified as a Heuglin's Gull. However, identification and separation of graellsii/intermedius Lesser Black-backed Gull from Heuglin's Gull outside its breeding range is often impossible. This is one of the great challenges in gull ID and even if graellsii/intermedius would occur here (which is quite unlikely), it would not be possible to identify these with certainty without trapping / DNA analysis. Thus, if taxa other than those described here are seen in the state, or the country, careful observations and also good photographs would be needed for identification. It would be prudent to state here that in-spite of best efforts, some gulls will remain unidentified as there are many features which are overlapping in these taxa. Identification and separation in first-winter plumages is especially challenging. Also, only the basic plumage descriptions are provided here and there is some variation

even in adult birds of these taxa and hence, careful observation is usually needed, and even then, some birds are notoriously difficult to identify.

Regarding the other species of gulls occurring here, there is some data on their status and distribution, especially of Pallas's Gull and Black-headed Gull / Brown-headed Gull / Slender-billed Gull. These are relatively easy to identify and are seen in almost all parts of the state. The other three vagrant species - the Mew Gull, Little Gull and Black-legged Kittiwake, are known to occur in the state and the Mew Gull and Black-legged Kittiwake have been photographed here. It is quite possible that the Little Gull could also be seen and photographed in Gujarat in the near future as the increasing number of birders and the access to digital cameras has led to a more people photographing birds in various parts of the state. It is best if bird watchers familiarize themselves with the first-winter and immature plumages of Mew Gull, Little Gull and Black-legged Kittiwake since vagrancy is more likely in first-winter or immature birds rather than in adults.

In this regard, the Sooty Gull is also a likely candidate for addition to the Gujarat checklist in the future. Other gull species like Franklin's Gull (*Leucophaeus pipixcan*), Sabine's Gull (*Xema sabini*) and White-eyed Gull (*Ichthyaetus leucophthalmus*) have been noted in India and are included in the India checklist v3.0 (Praveen *et al.* 2019). With long distance migrant gulls, incidences of vagrancy are high and it is always possible that such species could turn up in the least expected locations! So, photographing the odd-looking or smaller-sized gull in gull flocks is very important as it could be one of the rarer species. But, always remember to take a large number of good photographs, from different angles (and in flight) of gulls which look different in the field.

It is hoped that this paper will lead to bird watchers becoming more aware of the various gull taxa occurring in the state and more attention will be given to the gulls here. Gujarat, with its long coastline and suitable habitats, is an ideal place for gull-watching and we should take advantage of our location to watch gulls here and increase our knowledge of these birds.

## **Acknowledgements**

Since I started gull-watching a few years ago, many experts have helped me with the identification of gulls in Gujarat and I would like to thank Klaus Malling Olsen, Andreas Buchheim, Arend Wassink, Nial Moores and Norman Deans van Swelm for taking the time to explain the finer details of gull identification. I am grateful to Maulik Varu for sharing the data on breeding of Slender-billed Gulls. I am thankful to Peter Adriaens for details of the Mew Gull specimen and especially

to Hein Van Grouw for checking the museum specimens of Mew Gulls in NHM, UK. I thank Stanislav Harvančík, Aseem Kothiala, Pankaj Maheria and Michelle & Peter Wong for contributing photographs. I am grateful to Ashwin Trivedi, Ashok Mashru, Manoj Finava, Maulik Varu, Gaurang Bagda, Kapilsinh Zala and Swadeepsinh Jadeja for their company in the field. I would like to specially thank Dr. Bakul Trivedi for suggesting that an article on the gulls of Gujarat, with updated taxonomy, was much required.

#### References

Adriaens, P. & Gibbins, C. 2016: Identification of the *Larus canus* complex. *Dutch Birding* 38: 1-64

Ali, S. & Ripley, S. D., 1981. Handbook of the birds of India and Pakistan together with those of Bangladesh, Nepal, Bhutan and Ceylon. Vol 3 of 10. (Sponsored by Bombay Natural History Society.) Oxford University Press. Delhi.

Buchheim, A., 2006. Adult large white-headed gulls at Okha, Gujarat, India - a photo documentation. *Birding ASIA* 5: 40–53

Collinson, J. M., Parkin, D. T., Knox, A. G., Sangster, G., & Svensson, L., 2008. Species boundaries in the Herring and Lesser Black-backed Gull complex. *British Birds* 101 (7): 340–363

Eaton, J., 2013. Mew Gull from Bhuj, Gujarat. *Indian BIRDS 8* (6): 165 Ganpule, P., 2015. Status of Caspian Gull *Larus cachinnans* in India. *Indian BIRDS* 10 (6): 152–154

Ganpule, P., 2016a. Observations of probable Taimyr Gulls *Larus fuscus taimyrensis* at Okha, Gujarat, India. *Indian BIRDS* 12 (1): 1–4.

Ganpule, P., 2016b. The birds of Gujarat: Status and distribution. *Flamingo* 8(3)-12(4): 2-40

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

Kazmierczak, K., 2000. A field guide to the birds of India, Sri Lanka, Pakistan, Nepal, Bhutan, Bangladesh and the Maldives. Pica Press / Christopher Helm. London.

Kothiala, A. K., 2011. http://orientalbirdimages.org/search.php?Bird\_Image\_ID=88878& Bird\_ID=941&Bird\_Family\_ID=&Location=gujarat [Accessed on 29 July 2019].

Malling Olsen, K., 2018. *Gulls of the world:* A photographic guide. Christopher Helm, London.

Malling Olsen, K., 2019. Mew Gull Larus canus heinei in Gujarat in January 2006. Flamingo Gujarat 17 (1): 6

Malling Olsen, K., & Larsson, H., 2004. *Gulls of Europe, Asia and North America*. Reprinted with corrections ed. Christopher Helm. London.

Praveen J., Jayapal, R. & Pittie, A., 2016. A checklist of the birds of India. *Indian BIRDS* 11 (5&6): 113–172A.

Praveen J., Jayapal, R., & Pittie, A., 2019. *Checklist of the birds of India* (v3.0). Website: http://www.indianbirds.in/india/ [Date of publication: 05 May, 2019].

Rasmussen, P. C., & Anderton, J. C., 2012. *Birds of South Asia: The Ripley guide.* 2 nd Ed. Smithsonian Institution and Lynx Edicions. Washington, D.C. and Barcelona.

Van Dijk, K., Kharitonov, S., Holmer, V., & Bart, E., 2011. Taimyr Gulls: evidence for Pacific winter range, with notes on morphology and breeding. *Dutch Birding* 33: 9–21

Williams, D., & Gottschling, M., 2018. The Baltic Gull *Larus fuscus fuscus* in Goa: An addition to the Indian avifauna. *Indian BIRDS* 18 (1): 32–32A

Yésou, P., 2001. Phenotypic variation and systematics of Mongolian Gull. Dutch Birding 23: 65-82  $\hfill\Box$ 

# Notes on the breeding of Black Bittern *Dupetor flavicollis* near Nal Sarovar Bird Sanctuary

**Devvratsinh Mori:** Opp. Darbar Gadh, Wadhwan 363030. devvratsinhmori@gmail.com

The Black Bittern (*Dupetor flavicollis*) is one of the largest resident bittern species (Family: Ardeidae) in the Indian Subcontinent. The taxonomic status of the Black Bittern is uncertain. It was treated as *Dupetor flavicollis* by Grimmett *et al.* (2011), and put in the monospecific genus *Dupetor*, while recent authorities like Martínez-Vilalta *et al.* (2019) treat it as a part of the genus *Ixobrychus*, in which other bittern species are placed. I follow the taxonomy as per Grimmett *et al.* (2011).

The Black Bittern has blackish upperparts, with yellow malar and sides of neck and dark streaking on underparts; the female is similar, with browner upperparts and chestnut-streaked underparts. The Black Bittern is resident and partly migratory,

and is thinly and patchily distributed throughout the better watered parts of the Indian Subcontinent from Sindh, in Pakistan, to Assam, West Bengal and beyond; it is said to be fairly common in South-west India in Kerala, Karnataka etc. (Ali & Ripley 1981). For Gujarat, Ali (1954) did not record this species in the state. It was seen and confirmed to be breeding around Pariej Tank near Tarapur, Kheda district, in 1990, along with Cinnamon Bittern (*Ixobrychus cinnamomeus*) and Yellow Bittern (*Ixobrychus sinensis*) (Khacher 1996, Mukherjee et al. 2002). In the recent Gujarat checklist, the Black Bittern was stated to be 'uncommon to rare monsoon breeding migrant with isolated records from many parts of the state' (Ganpule 2016). A recent study by Patel et al. (2018) further confirmed