

## Note on *Riparia* species in Gujarat

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### Introduction

*Riparia* Forster, T., 1817, is a genus of the family Hirundinidae. The genus is often collectively referred to as 'Sand Martins'. The taxonomy of this complex is tricky and frustrates quite many birders, and it is only recently that their threads have

been untangled to some extent. The Gujarat checklist (Ganpule 2016) mentioned three species of *Riparia* occurring in Gujarat – Plain Martin (*Riparia paludicola*), Sand Martin (*R. riparia*), and Pale Martin (*R. diluta*). Table-1 summarizes the names used now with the recent taxonomic changes.

**Table-1: Annotated list of the revised name(s) of *Riparia* species [Details collected from Grimmett et. al (2011) and Ganpule et. al (2022)]**

	Name as per Ganpule 2016	Name as per Grimmett et al. 2011	Name and taxonomy as per Ganpule et al. 2022	Comments
1	Plain Martin ( <i>Riparia paludicola</i> )	Plain Martin ( <i>Riparia paludicola</i> )	Grey-throated Martin ( <i>Riparia chinensis</i> )	Taxonomy updated as per recent changes
2	Sand Martin ( <i>Riparia riparia</i> )	Sand Martin ( <i>Riparia riparia</i> )	Sand Martin ( <i>Riparia riparia</i> )	No change
3	Pale Martin ( <i>Riparia diluta</i> )	Pale Martin ( <i>Riparia diluta</i> )	Pale Martin ( <i>Riparia diluta</i> )	No change

### Status of *Riparia* species in Gujarat

All three species mentioned in the Gujarat checklist and the field guide are seen across Gujarat, majorly across wetlands and rivers. Table 2 tries to summarize the distribution of the three species within Gujarat using some well-acknowledged literary sources.

**Table-2: Ranges of the species across Gujarat. [Details collected from Grimmett et.al (2011) Rasmussen & Anderton (2012), Ganpule 2016, and Ganpule et.al (2022)]**

Source	Grey-throated Martin	Sand Martin	Pale Martin
Ganpule 2016	Common resident. Sightings from Saurashtra and Gujarat. Also from Kachchh	Uncommon winter visitor. Sightings from Saurashtra and Kachchh. Common in Banni area in Kachchh. Also in Gujarat, but probably rare	Common winter visitor. Sightings from all over the state
Grimmett et al. 2011	Shown to be resident in almost all of Gujarat	Isolated winter record shown for Gujarat with the comment that range confused with Pale Martin	Shown to be a common winter visitor to Kutch and Saurashtra
Rasmussen & Anderton 2012	Resident across Gujarat; Rivers and earth cliffs	Little-known range; photographed in Gujarat	Probably seen in Gujarat (no specific mention about Gujarat in text)
Ganpule et al. 2022	Uncommon resident in some parts of the state	Common to uncommon winter visitor to some parts of the state	Uncommon winter visitor to some parts of the state
Author's comments (via eBird data and personal communication with birders)	Resident. Common across riverine habitats and large waterbodies. Rare/absent from Kutch, Saurashtra (except Jamnagar) and South Gujarat.	Winter visitor. Widespread across wetlands (coastal too). Absent (?) from Junagadh and Amreli.	Winter Visitor. Rare/uncommon. Sightings mainly from Kutch and Ahmedabad districts. No reports from South Gujarat and rare in Saurashtra (a few reports from Jamnagar and Bhavnagar).

## Riparia....

Below are some pictures selectively picked from Citizen Science website, eBird, wherein the identification markers are carefully shown and explained.



**Picture-1: Grey-throated Martin (*R. chinensis*)** from Vadodara, Gujarat by Dr. Pankaj Maheria. Note the grey-brown throat and no apparent breastband.



**Picture-2: Grey-throated Martin (*R. chinensis*)** from Gandhinagar, Gujarat by Saswat Mishra

Often, the throat will not be prominently dark due to wear in the plumage and it seems that the bird possesses a breast band. But, it clearly has brownish marks on the throat that point towards Grey-throated Martin.



**Picture-3: Sand Martin** by Sriram Reddy at Ahmedabad



**Picture-4: Sand Martin** by Dipayan Chakraborty at Ahmedabad. Note that the bird in picture 4 shows quite clearly demarcated ear patch and dark breast band.



**Picture-5: Sand Martin (*R. riparia*)** from Kerala (extralimital) by Abhinand Chandran. Note the prominent dark and contrasting breast band.



**Picture-6: Pale Martin (*R. diluta*)** from Ahmedabad by Vyom Vyas. Note the diffuse and less prominent breastband as compared to that of Sand Martin. This identification is tricky since immature Sand Martins are often known to exhibit similar breast band and facial pattern. Note that ear coverts

show clear-cut border. Presumed to be Pale Martin but Sand Martin cannot be ruled out. Biometrics / DNA analysis is required to confirm such individuals.



**Picture-7: Pale Martin** by Vyom Vyas at Ahmedabad  
‘Textbook’ Pale Martins often show indistinct half collars, diffuse ear-coverts and a pale-greyish plumage as in Picture 7.

**Table-3: Examples of individuals of each species from Gujarat.**

	Macaulay Library Link	Observer(s)
<b>Grey-throated Martin (<i>R. chinensis</i>)</b>		
Sant Sarovar, Gandhinagar	<a href="https://macaulaylibrary.org/asset/583539381">https://macaulaylibrary.org/asset/583539381</a>	Saswat Mishra
Juna Pungam, Bharuch	<a href="https://macaulaylibrary.org/asset/459065291">https://macaulaylibrary.org/asset/459065291</a>	Jugal Patel
<b>Pale Martin (<i>R. diluta</i>)</b>		
LRK, Kutch	<a href="https://macaulaylibrary.org/asset/379352161">https://macaulaylibrary.org/asset/379352161</a>	J.P. Suman
Nalsarovar, Ahmedabad	<a href="https://macaulaylibrary.org/asset/407225031">https://macaulaylibrary.org/asset/407225031</a>	Vyom Vyas
Nalsarovar, Ahmedabad	<a href="https://macaulaylibrary.org/asset/415993401">https://macaulaylibrary.org/asset/415993401</a>	Dhiren Shah
<b>Sand Martin (<i>R. riparia</i>)</b>		
Nalsarovar, Ahmedabad	<a href="https://macaulaylibrary.org/asset/530129061">https://macaulaylibrary.org/asset/530129061</a>	Sudip Simha
Mahuva, Bhavnagar	<a href="https://macaulaylibrary.org/asset/441221841">https://macaulaylibrary.org/asset/441221841</a>	Mahendra Bhil

### Discussion regarding distribution

The comparison done here is based on records from eBird and personal observations. Simultaneously, while writing and researching on this, some individuals were found to be mis-identified on eBird.

**Grey-throated Martin** – As per Ganpule 2016, these are common across Saurashtra and Gujarat with sightings from Kutch. Rasmussen & Anderton (2012) have just mentioned it to be present in Gujarat as a resident with no more details. Grimmett et. al (2011) showed them to be resident across Gujarat except in parts of North and East Gujarat where no

occurrence was shown. Ganpule et. al (2022) mentioned these to be resident across Gujarat but uncommon in some parts. Thus, there is no clarity regarding the status and distribution.

As per current status, Grey-throated Martins are almost completely absent from western Kutch and there are only a handful of sightings from LRK. It is quite spread across the riverine belts of Gujarat (Sabarmati and Narmada tributaries being the major strongholds). Reported frequently from Jamnagar, but rare/absent across rest of Saurashtra. Also absent/unreported from south Gujarat. Breeds in riverine cliffs or sand-banks.

## Riparia....

**Sand Martin** – Ganpule 2016 states it as an uncommon winter visitor but common in Banni (Kutch) and probably rare in Gujarat. Grimmett et. al (2011) as well as Rasmussen & Anderton (2012) mentions only a sighting from Gujarat. Ganpule et. al (2022) have mentioned these (to be a) as common to uncommon winter visitors across various parts of Gujarat.

As per the current status, these are quite regular winter visitors in Kutch and Ahmedabad (Nalsarovar), Vadodara and the coastal belt. Rare/absent from central Saurashtra (?). Scarcely in east Gujarat.

**Pale Martin** – Thought to be a common winter visitor across the whole state by Ganpule (2016). While there is no mention of Gujarat, Rasmussen & Anderton (2012) said that these might winter and be widespread across India. Grimmett et. al (2011) showed these to be winter visitors to Kutch and Saurashtra. Ganpule et. al (2022) mentioned it to be winter visitors, though uncommon in some parts. The findings of this paper does not quite align with the ones that of Ganpule et al (2022).

As per current status based on reports from eBird and from personal observations, Pale Martin is uncommon when compared with its congeners in Gujarat. Most of the sightings are of single individuals that were found in flocks of other Hirundinids like Barn Swallow (*Hirundo rustica*). A handful of sightings across Kutch, Ahmedabad, Vadodara and Bhavnagar are reported on eBird. Thus, the distribution is not as widespread as indicated.

The reason for the lack of sightings might be:

(A) More studies are still required to fully untangle the identification of this group. Difficulty in identification could be a major issue.

(B) Martins are often hard to photograph when they're flying since these birds are agile and hard to focus on.

(C) Lack of adequate documentation of *Riparia* martins from various regions.

It should be noted that this is just a baseline data provided here. Since there are many misidentifications on eBird and since the field identification of this taxa is difficult, the true status of these species in Gujarat is not clear. Birders visiting areas with various swallow/martin species are requested to document as many individuals as possible and upload them on citizen science websites in order to assess the status of this group. Though this still remains a topic of discussion, proper knowledge of the status and distribution of these species can be collected by studying the birds in the field and documenting them over a long period of time.

### Acknowledgements

I would like to thank all the photographers (P. Maheria, S. Mishra, S. Reddy, V. Vyas, D. Chakraborty and A. Chandran) who contributed the media required for the making of this note. I would also like to thank Sunil Kini and Prasad Ganpule in helping me make this manuscript.

### References

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