

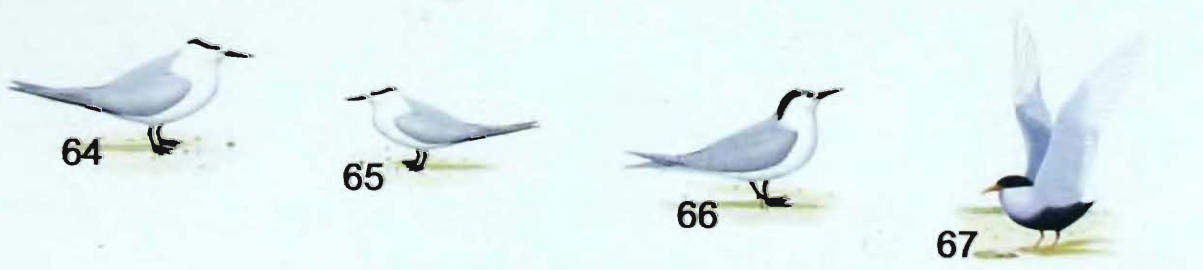
Shorebirds of Kerala

INCLUDING GULLS & TERNs



C. SASHIKUMAR
MUHAMED JAFER PALOT
SATHYAN MEPPAYUR
C. RADHAKRISHNAN





PICTORIAL HANDBOOK
SHOREBIRDS OF KERALA
(Including Gulls and Terns)

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Zoological Survey of India
Kolkata

CITATION

Sashikumar, C.; Muhamed Jafer Palot; Sathyan Meppayur and Radhakrishnan, C. 2004. *Pictorial Handbook –Shorebirds of Kerala (Including Gulls and Terns)* : 1-165. (Published Director, Zool. Surv. India)

Published : August, 2004

ISBN 81-8171-047-9

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PRICE

Indian Rs. 700.00

Foreign : \$ 50; £ 30

Published at the Publication Division by the Director Zoological Survey of India, 234/4, AJC Bose Road, 2nd MSO Building, 13th floor, Nizam Palace, Kolkata 700020 and Printed at Shiva Offset Press, Dehra Dun.

FOREWORD

Shorebirds, or Waders are among the world's greatest migrants and may be considered truly international species. Their long migration from the arctic tundra to tropical Asia and on to southern temperate latitudes make them an interesting and challenging group to study. Some nest in one country, migrate through others and spend the non-breeding period in yet others, often on a different continent. This is one of the most popular groups of birds in the world because of the huge distances travelled. Many of these birds breed in the extreme north (temperate and polar regions) and winter under the tropical sun.

Most people new to shorebirds study are completely bewildered by their first experience of shorebirds in the wild. There are so many different shapes, colours, sizes and calls, birds moving everywhere, flying, running or walking in different directions, and some even sleeping, so that not every part of the bird is visible. This is nothing new, and many very experienced birdwatchers with 10 or 20 years experience feel the same way when confronted by shorebirds. However, shorebirds are a relatively easier group for identification as each species has some conspicuous characters to differentiate it from the other closely related species. I say this not just because of my involvement in research and conservation of this globally important group, but based on my experience in various wader-banding and wader-watching training camps that I organized. Participants new to wader-watching have become familiar with wader identification in a short span of 15 to 20 days.

Waders were numerous and widely abundant in India a few decades ago. Due to habitat loss and degradation, harmful industrial developments, unregulated agricultural practices, human disturbance, climatic and environmental changes, they are becoming scarce at many key sites. Waders are biological indicators and they are clearly linked to environmental changes both in breeding and wintering grounds.

This field guide is a unique compilation on waders from a little known part of the world. All species of waders recorded in Kerala are described and illustrated here. Most of the wader species retain their juvenile characters till the end of their first winter; waders are the easiest group to age accurately. This book provides information on juvenile characters for all the species and will enable the observer to differentiate the young birds from the adults using a telescope or high power binoculars.

Kerala state is credited with producing many birdwatchers, though wader-watchers are relatively less. This is mainly due to the paucity of wader haunts in the state despite the vast expanse of inland wetland.

I am sure this book will induce enthusiasm and fascination among bird-watchers for the most amazing group of migratory birds on earth. Identification helps successful conservation and protection of the species at risk. Some of the wader species are at risk globally. These need to be identified properly for conservation and protection. I must congratulate the Zoological Survey of India and the authors who have made painstaking efforts to bring out this field guide to increase awareness about waders, thus encouraging conservation of this globally important group and its habitats.

July, 2004

Mumbai

Dr. S. Balachandran

Senior Scientist

Bombay Natural History Society

PREFACE

The grey and white shorebirds may not fit into the norms attributed to the aesthetic beauty, which is generally associated with birds, by the layman. These birds are neither colourful, nor are they good songsters. But, once you observe them closely, you will find that they are second to none other in beauty; the grey shading on the sandpiper is delicate, the scalloping and barring on the snipes are intricate and the contrast in the black and white plumage of the oystercatcher and avocet is striking. The perky movements of these birds as they feed are truly endearing; the speed with which the sanderlings pursue and then flee the roaring waves, their legs in a blur, is breath-taking. And once they take-off, they twist and turn in unison, maintaining complete harmony. The flight of the gulls and terns is sheer poetry in motion.

For the ornithologist, every aspect of the shorebirds is fascinating. Their identification itself presents a challenge. Their long flight across the continents still intrigues researchers. Further, they are considered as indicators of the habitat quality of the wetland- an endangered ecosystem in our country, which they inhabit.

We present this work in the hope that this group of birds will get the attention they deserve.

C. SASHIKUMAR
MUHAMED JAFER PALOT
SATHYAN MEPPAYUR
C. RADHAKRISHNAN

ACKNOWLEDGEMENTS

First and foremost, we are indebted to late Prof. K.K. Neelakantan, who through his seminal work in Malayalam *Keralathile Pakshikal* was instrumental in creating within us the interest in birds.

We are extremely grateful to Dr. J.R. B. Alfred, Director, Zoological Survey of India, Kolkata whose insightful idea of publishing popular series of handbooks and scientific documents on fauna of the country, spurred our inspiration for presenting this work. His constant encouragements and generous support including the facilities extended are gratefully acknowledged.

We have consulted many works while preparing this book. The most important of these were *A handbook of the birds of India and Pakistan* (Salim Ali and Dillon Ripley, 1983) and *Shorebirds: An identification Guide to the Waders of the World* (Peter Hayman *et al.*, 1986). We are obliged to the authors of these ornithological works.

Dr. S. Balachandran, Senior Scientist, Bombay Natural History Society, Mumbai was kind enough to scrutinize the manuscript and offered many valuable suggestions. He has also provided a Foreword to this book. We gratefully acknowledge his contribution.

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INTRODUCTION

During the early 1980s, when we used to observe the birds at the estuaries, seacoast and other wetlands of north Kerala, we had always been perplexed at the identity of several species of shorebirds encountered. The bird-books available at that time, we found to our consternation, were totally inadequate to deal with this complex group of waders. Later, the book *Shorebirds: an Identification Guide to the Waders of the World* (Hayman *et al.* 1986) appeared on the scene. Apart from being extremely useful in correct identification, this classic made us aware of the intricacies of the various plumages, phases etc. concerning the shorebirds. The fact that more than 12 species of shore birds hitherto unrecorded in Kerala were found to occur here since 1987 underlines the importance of this book and the interest generated in this difficult group of birds in the region, though only a handful of birdwatchers possessed a copy of the book. We wanted to share the identification skills we had newly acquired and the culmination was a workshop on the field identification of shorebirds held at Madayipara, Kannur district in August 1995 in which several birdwatchers from different parts of Kerala participated. But, even after almost two decades since then, we find that shorebird study in Kerala is still in its infancy. There are still only a few individuals who grapple with the shorebird identification problems, there are no regular monitoring programmes for the major wintering areas and there is no ringing data at all on our shorebirds.

The present volume, which is a regional guide on the shorebirds, gulls and terns will generate sufficient new interest in this interesting group of birds, we hope.

KERALA

The state of Kerala lies along the southern west coast of India approximately between the latitudes 8°17' and 12°45'N and longitudes 75°11' and 77°20'E. It is bounded by Karnataka in the north, Tamil Nadu in the south, Western Ghats in the east and the Lakshadweep Sea in the west. The land area is about 38,863sq.km. Physiogeographically, the area can be broadly divided into four provinces namely the highlands (600-2500m above MSL), the midlands (300-600m above MSL), the lowlands (30-300m) and the coastal plain. About 24,000sq.km.(61.5%) of the total area lies within 0-300m above MSL. Most of the wetlands also lie in this region of the state.

Climate

The climate of Kerala is of the tropical monsoon type with abundant rainfall and hot summer. The southwest monsoon pours over Kerala from June to September, which is the main rainy season. Rains also occur during October-December under the influence of the northeast monsoon. March to May is the summer season. The mean temperature varies from 19°-33°C, the annual average rainfall is from 180cm to 380cm in various part of the state.

Wetlands of Kerala

The unique setting of Kerala with its climate and physiography attributes the formation of different forms of wetlands. As per the survey conducted by the Ministry of Environment and Forests, New Delhi, Kerala leads all other states in the country in having the highest area under wetlands- 0.63% of natural and 5.42% of artificial wetlands, while all India figures are correspondingly 0.45% and 0.02%. According to Nayar and Nayar (1997), Kerala has a total wetland area of about 4,66,046ha. While most of the natural wetlands of the state are brackish, there are a few freshwater bodies also. The significant freshwater wetlands are Sasthamkotta, Pookot, Vellayani, Enamkkal, Manakkodi, Muriyad, Eravikulam, Devikulam and Elephant Lake. A detailed account on some of the wetland types of Kerala is given below :

Wetlands of Kerala (Source : Nayar and Nayar, 1997)

Sl. No.	Category	Area/Number
1.	Coastline length	580km
2.	Canals length	1,483km
3.	Freshwater bodies	
	A. River area	85,000ha
	B. Reservoir area	29,635ha
	C. Pond and Tank area	3,300ha
4.	Brackish water bodies: lakes, backwaters and estuaries.	2,42,600ha
5.	Traditional prawn fields	12,511ha
6.	Kole Wetlands	11,000ha
7.	Kuttanad Wetlands	82,000ha
	Total	4,66,046ha

1. **Rivers and Estuaries** : Kerala has 41 west flowing and 3 east flowing rivers, most of these originate from Western Ghats. 20 of these rivers discharge directly into the Lakshadweep Sea, forming estuaries while the rest empty into backwaters (*kayals*). Many of these estuaries have sand and mudflats exposed during low tides. These are the major wintering grounds of the shorebirds.

2. **Backwaters and lagoons** : A unique feature of Kerala's river system is the backwaters on the coastal plains, running parallel to the sea separated from it by narrow strips of sand bars. These *kayals* have some permanent and several seasonal openings into the sea making them a vast estuarine system. The Vembanadu *kayal* extending from Ernakulam to Kottayam and Ashtamudi *kayal* in Kollam district are the two major saline backwater systems. There are a few freshwater lakes also, Sasthamkotta *kayal* in Kollam district being the largest. These three *kayals* were declared as Ramsar Sites of international conservation concern in 2002.

3. Mangroves : Kerala had around 700 sq.km area of mangrove forest all along the coastal plains associated with estuarine and backwater systems. At present our mangrove wealth is reduced to 17 sq. km, mostly in the northern districts of Kannur and Kasaragod districts.

4. Sea shore : 580km long coastline borders the western side of Kerala. In the north, the coastline is broken at many places by low laterite cliffs, but it is more or less a continuous stretch of sandy beaches south of Kozhikode.

5. Paddyfields and associated tank and canal systems : In Kerala, 8,01,700ha of land is under paddy cultivation mostly in the coastal wetlands and the central laterite region adjacent to it. A major portion of these fields are rainfed and the rest are irrigated. 8,100ha of the *Kole* fields in the Thrissur and the Malappuram districts and 54,935ha of Kuttanad in Alappuzha districts are the two major paddy cultivated areas. 24,400ha of saline soil in the Ernakulam, Alappuzha, Kannur and Kasaragod districts are also under paddy cultivation. Numerous shorebirds use this area for foraging and breeding. Along with the Vembanad *kayal*, *Kole* fields also have been declared as a Ramsar Site.

6. Hydrel and Irrigation reservoirs : 52 barrages and dams have been constructed in Kerala for the purpose of irrigation and power generation. The extensive water spread areas of the reservoirs offers good foraging and breeding ground for several species of shorebirds and terns.

Shorebird habitat today

The entire shorebird habitat in Kerala is under threat today :

1. Change in Land Use : The coastal plain has a very high population density and there is great pressure on the land. The process of reclamation of mangrove swamps, paddy fields and backwaters is on the increase both in private and government owned land. Conversion of paddy fields, though legally prohibited, to other crops, housing plots, brick kilns, etc. is another alarming trend. This in turn affects the neighbouring paddy fields by water-logging and other factors. Construction of new railway lines and roads through wetlands is also creating many serious problems. The recent promotion of aquaculture has led to the conversion of paddy fields, destruction of mangroves and pollution of wetlands in several parts of Kerala. Sand mining from riverbeds and seacoasts is also on the increase.

2. Excessive use of pesticides and fertilisers : Organochlorine and organophosphate pesticides and chemical fertilisers are widely being used in paddy cultivation all over the state. Studies conducted in the Kuttanad ecosystem have shown that these chemicals are present well above the permissible limits. No studies on the effect of this on shorebirds have yet been conducted anywhere in Kerala.

3. Unimaginative development plans : As the studies on Kuttanad and *Kole* have shown, the so-called development plans implemented by government agencies almost invariably prove to be a bane rather a boon on the ecosystem of the areas. The regulator at



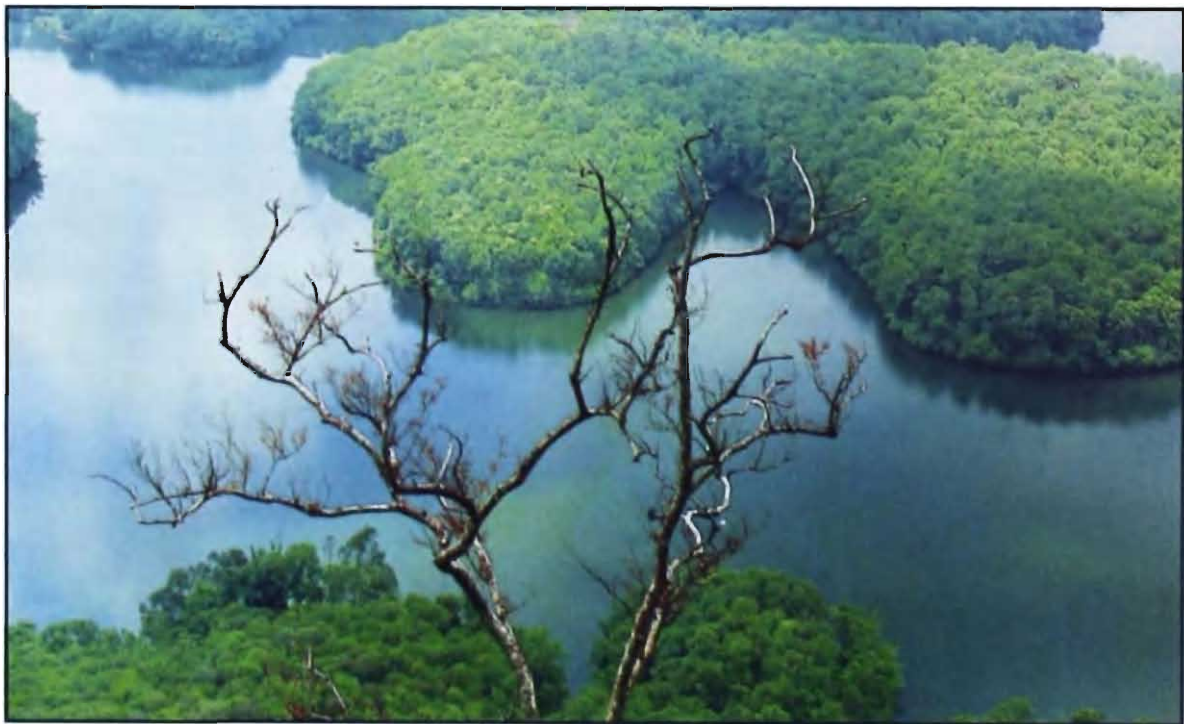
Fresh water Pond



Pockali field



Mangrove Wetland



Reservoir



Rocky Sea-shore



Riverine Wetland



Estuary



Paddy field

Thanneermukkam in Kuttanad completed in 1974 is a classic example. This barrage was constructed in 1974 to prevent saline water intrusion into the paddy fields of the area so that a second crop of paddy could be raised here. This caused considerable damage to the traditional agricultural practices and lifestyle of the local community (Ambat, 1992).

4. **Poaching** : Hunting of water birds and destruction of heronries go on unchecked all over Kerala, especially in the southern parts. The neo-urbanized, consumerist society of Kerala is in no way interested in protecting birds; it seems that almost all our heronries are under constant threat from the local people.

SHOREBIRDS, GULLS AND TERNS

We have described and illustrated here 71 species belonging to the order Charadriiformes hitherto recorded within the political boundary of the Kerala. The taxonomy and scientific nomenclature follow Manakadan and Pittie (2002). A brief description of the 10 families in this order follows :

Jacaniidae (Jacanas)

2 species (2 in India). Water birds with elongated toes and claws enabling them to walk on floating vegetation. Polyandrous. The responsibility of brooding and parental care is shouldered by the male.

Rostratulidae : (Painted Snipes)

1 species (1 in India). Brightly coloured and intricately patterned marsh bird. Sexually dimorphic, the female is larger and brighter. Polyandrous. Brooding and rearing of young ones carried over by male.

Haematopodidae : (Oystercatchers)

1 species (1 in India). Thickset waders with striking black and white plumage. Sexes alike. Feed mainly on bivalve molluscs.

Charadriidae : (Plovers and Lapwings)

12 species.(19 in India). Relatively long -legged and short-billed and round-headed birds. Sexes alike. Mostly terrestrial and gregarious. Run swiftly for short distances while feeding. Strong fliers.

Scolopacidae : (Sandpipers, Stints, Snipes, Godwits and Curlews)

28 species (41 in India). Strongly migratory. Long -billed and long- legged birds; the varied shape and size of their bills are adapted for foraging in mud.

Recurvirostridae : (Ibisbill, Avocets and Stilts)

2 species (3 in India). Strikingly black and white medium sized birds with long slender bill and legs. Forage wading in shallow water.

Dromadidae: (Crab Plover)

1 species.(1 in India). Unique hole-nesting bird with pied plumage and thick heavy bill. Crabs form its major food.

Burhinidae : (Stone Curlews and Stone Plovers/ Thick-knees)

2 species (3 in India). Birds with cryptically patterned plumage, 'goggle' eyes and longish legs with thick knee joint. Crepuscular in habit.

Glareolidae : (Coursers and Pratincoles)

3 species (6 in India). Aptly called swallow plovers, pratincoles have long wings and short legs. Hawk mainly aerial insects. Coursers are terrestrial birds with cryptic colouration, running fast on long legs.

Laridae : (Gulls and Terns)

19 species (37 in India). Web footed and largely in grey and white plumage. Gregarious and colonial breeders. Graceful fliers, mostly migratory.

HOW TO USE THE BOOK

Text

The species account consists of seven parts. **Field characters** give a short description of the species mainly based on jizz (general impression and shape). This is followed by detailed description of the plumage. In the case of migratory birds, the stress on adult non-breeding plumage; adult breeding plumage also is mentioned. In the case of resident birds, the order is reversed. Description of immature plumage comes next. Size, as given in the text, is approximate average length of the bird measured from bill-tip to tail-tip. Though most of the migratory species are rather silent in their winter quarters we have given renderings of their calls under the section **Voice**. Under **Habitat** the specific habitat in Kerala in which the bird occur is also included. General behaviour traits are stated under **Habits**. In the case of resident birds some details regarding breeding are given under the subtitle **Breeding**. **Status** mainly concerns that of the species in Kerala under different categories, the criterion for which is given below.

Common : Regularly seen at almost all the wetlands in fairly good numbers.

Uncommon : Seen in small numbers in certain wetlands.

Rare : Less than 10 sightings in the last 20 years.

Stragglers : Storm blown or accidental visitors.

The area north of Purathur (Bharathapuzha estuary) is referred to as north Kerala in this work (see Map).

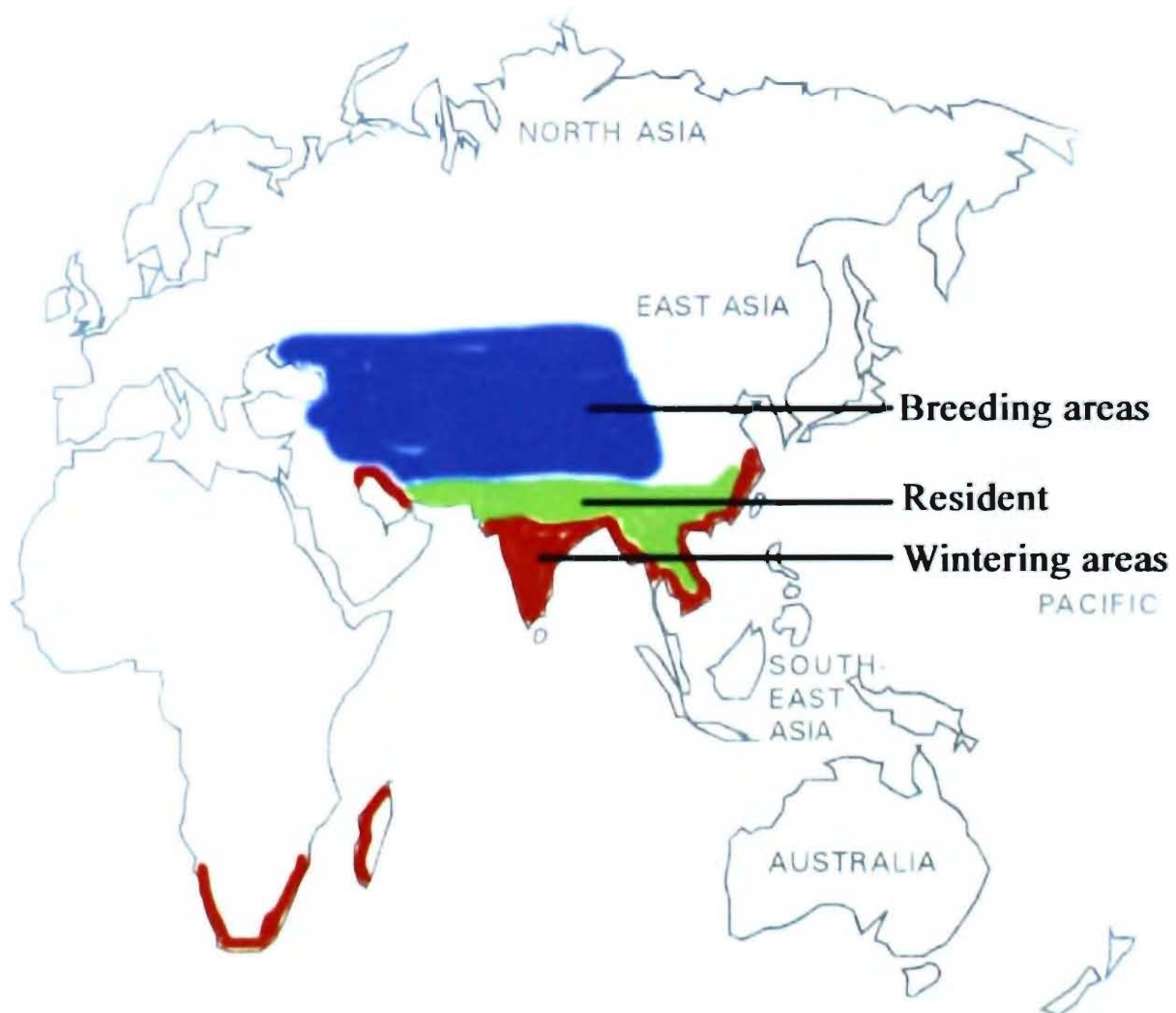
Malayalam Names : Names coined by Prof. K.K. Neelakantan, other previous workers and some newly coined by us (marked in asterisks) are given below the Common and Scientific names of each species.

Illustrations

Each species is illustrated on a full plate opposite to the descriptive text. In the case of migratory birds, non-breeding plumage has been depicted in large format whereas, breeding plumage is shown smaller in some cases. In the case of resident birds, the order is reversed and also the immature bird is shown. The user of the book is cautioned that all birds are illustrated in the same size in all the plates irrespective of their actual size and so comparison in size among illustrations is not possible. But in the descriptive text, the size of each species is provided in cms. Further, the front inside cover portrays all the 71 species in approximate comparative size. On plates, Br denotes breeding plumage, Non-br denotes non-breeding plumage and imm. immature plumage. Standard symbols indicate female and male.

Distribution Map

The distribution of the species in the Oriental, Palearctic, Australian and African zoogeographical realms is shown in the distribution maps. A map key is as shown below. Distribution given here is based mainly on Ripley (1982).



SYSTEMATIC LIST

- | | |
|--|---|
| <p>Jacanas</p> <p>1 Pheasant-tailed Jacana (358)</p> <p>2 Bronze-winged Jacana (359)</p> | <p>JACANIDAE</p> <p><i>Hydrophasianus chirurgus</i> (Scopoli, 1786)</p> <p><i>Metopidius indicus</i> (Latham, 1790)</p> |
| <p>Painted-Snipes</p> <p>3 Greater Painted-Snipe (429)</p> | <p>ROSTRATULIDAE</p> <p><i>Rostratula benghalensis</i> (Linnaeus, 1758)</p> |
| <p>Oystercatcher</p> <p>4 Eurasian Oystercatcher (360-361)</p> | <p>HAEMATOPODIDAE</p> <p><i>Haematopus ostralegus</i> Linnaeus, 1758</p> |
| <p>Plovers, Dotterels, Lapwings</p> <p>5 Pacific Golden-Plover (373)</p> <p>6 Grey Plover (371)</p> <p>7 Common Ringed Plover (378)</p> <p>8 Little Ringed Plover (379-380)</p> <p>9 Kentish Plover (381-382)</p> <p>10 Lesser Sand Plover (384-384a)</p> <p>11 Greater Sand Plover (374)</p> <p>12 Yellow-wattled Lapwing (370)</p> <p>13 Grey-headed Lapwing (365)</p> <p>14 Red-wattled Lapwing (366-368)</p> <p>15 Sociable Lapwing (363)</p> <p>16 White-tailed Lapwing (362)</p> | <p>CHARADRIIDAE</p> <p><i>Pluvialis fulva</i> (Gmelin, 1789)</p> <p><i>Pluvialis squatarola</i> (Linnaeus, 1758)</p> <p><i>Charadrius hiaticula</i> Linnaeus, 1758</p> <p><i>Charadrius dubius</i> Scopoli, 1786</p> <p><i>Charadrius alexandrinus</i> Linnaeus, 1758</p> <p><i>Charadrius mongolus</i> Pallas, 1776</p> <p><i>Charadrius leschenaultii</i> Lesson, 1826</p> <p><i>Vanellus malabaricus</i> (Boddaert, 1783)</p> <p><i>Vanellus cinereus</i> (Linnaeus, 1758)</p> <p><i>Vanellus indicus</i> (Boddaert, 1783)</p> <p><i>Vanellus gregarius</i> (Pallas, 1771)</p> <p><i>Vanellus leucurus</i> (Lichtenstein, 1823)</p> |
| <p>Sandpipers, Stints, Snipes,
Godwits & Curlews</p> <p>17 Eurasian Woodcock (411)</p> <p>18 Wood Snipe (405)</p> <p>19 Pintail Snipe (406)</p> <p>20 Swinhoe's Snipe (407)</p> <p>21 Common Snipe (409)</p> <p>22 Jack Snipe (410)</p> <p>23 Black-tailed Godwit (389-390)</p> <p>24 Bar-tailed Godwit (391-391a)</p> <p>25 Whimbrel (385-386)</p> <p>26 Eurasian Curlew (387-388)</p> <p>27 Spotted Redshank (392)</p> <p>28 Common Redshank (393, 394)</p> <p>29 Marsh Sandpiper (395)</p> <p>30 Common Greenshank (396)</p> <p>31 Green Sandpiper (397)</p> | <p>SCOLOPACIDAE</p> <p><i>Scolopax rusticola</i> Linnaeus, 1758</p> <p><i>Gallinago nemoricola</i> Hodgson, 1836</p> <p><i>Gallinago stenura</i> (Bonaparte, 1830)</p> <p><i>Gallinago megala</i> Swinhoe, 1861</p> <p><i>Gallinago gallinago</i> (Linnaeus, 1758)</p> <p><i>Lymnocyptes minimus</i> (Brünnich, 1764)</p> <p><i>Limosa limosa</i> (Linnaeus, 1758)</p> <p><i>Limosa lapponica</i> (Linnaeus, 1758)</p> <p><i>Numenius phaeopus</i> (Linnaeus, 1758)</p> <p><i>Numenius arquata</i> (Linnaeus, 1758)</p> <p><i>Tringa erythropus</i> (Pallas, 1764)</p> <p><i>Tringa totanus</i> (Linnaeus, 1758)</p> <p><i>Tringa stagnatilis</i> (Bechstein, 1803)</p> <p><i>Tringa nebularia</i> (Gunner, 1767)</p> <p><i>Tringa ochropus</i> Linnaeus, 1758</p> |

- 32 Wood Sandpiper (398)
- 33 Terek Sandpiper (400)
- 34 Common Sandpiper (401)
- 35 Ruddy Turnstone (402)
- 36 Great Knot (413)
- 37 Sanderling (414)
- 38 Spoonbill Sandpiper (423)
- 39 Little Stint (416)
- 40 Temminck's Stint (417)
- 41 Dunlin (420, 421)
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Thick-knees**

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- 59 River Tern (463)
- 60 Lesser Crested Tern (479)
- 61 Large Crested Tern (478)
- 62 Sandwich Tern (480)
- 63 Black-naped Tern (468-469)

- Tringa glareola* Linnaeus, 1758
- Xenus cinereus* (Guldenstadt, 1774)
- Actitis hypoleucos* Linnaeus, 1758
- Arenaria interpres* (Linnaeus, 1758)
- Calidris tenuirostris* (Horsfield, 1821)
- Calidris alba* (Pallas, 1764)
- Calidris pygmeus* (Linnaeus, 1758)
- Calidris minuta* (Leisler, 1812)
- Calidris temminckii* (Leisler, 1812)
- Calidris alpina* (Linnaeus, 1758)
- Calidris ferruginea* (Pontoppidan, 1813)
- Limicola falcinellus* (Pontoppidan, 1763)
- Philomachus pugnax* (Linnaeus, 1758)

RECURVIROSTRIDE

- Himantopus himantopus* (Linnaeus, 1758)
- Recurvirostra avosetta* Linnaeus, 1758

DROMADIDAE

- Dromas ardeola* Paykull, 1805

BURHINIDAE

- Burhinus oedicephalus* (Linnaeus, 1758)
- Esacus recurvirostris* (Cuvier, 1829)

GLAREOLIDAE

- Cursorius coromandelicus* (Gmelin, 1789)
- Glareola maldivarum* J.R. Forster, 1795
- Glareola lactea* Temminck, 1820

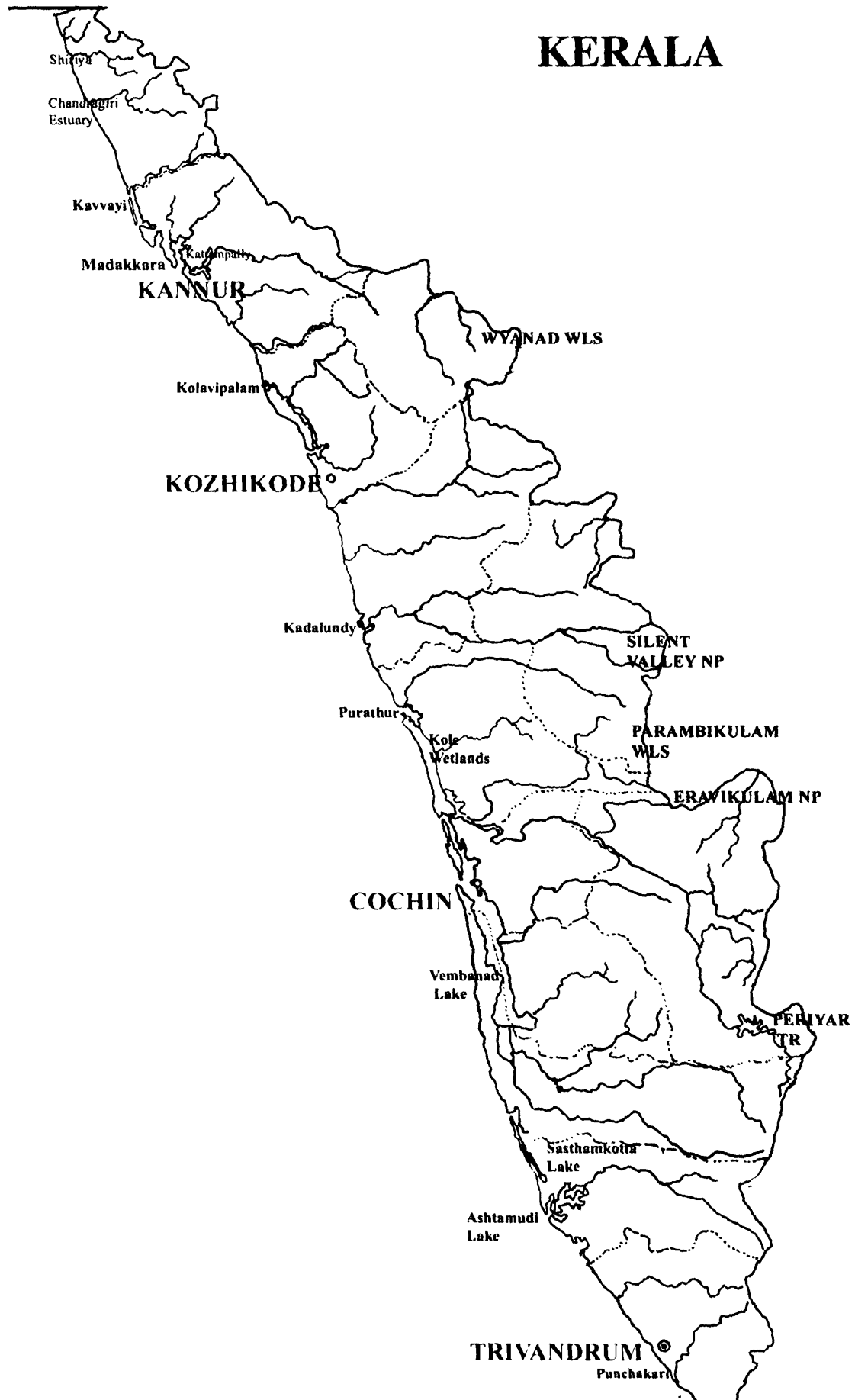
LARIDAE

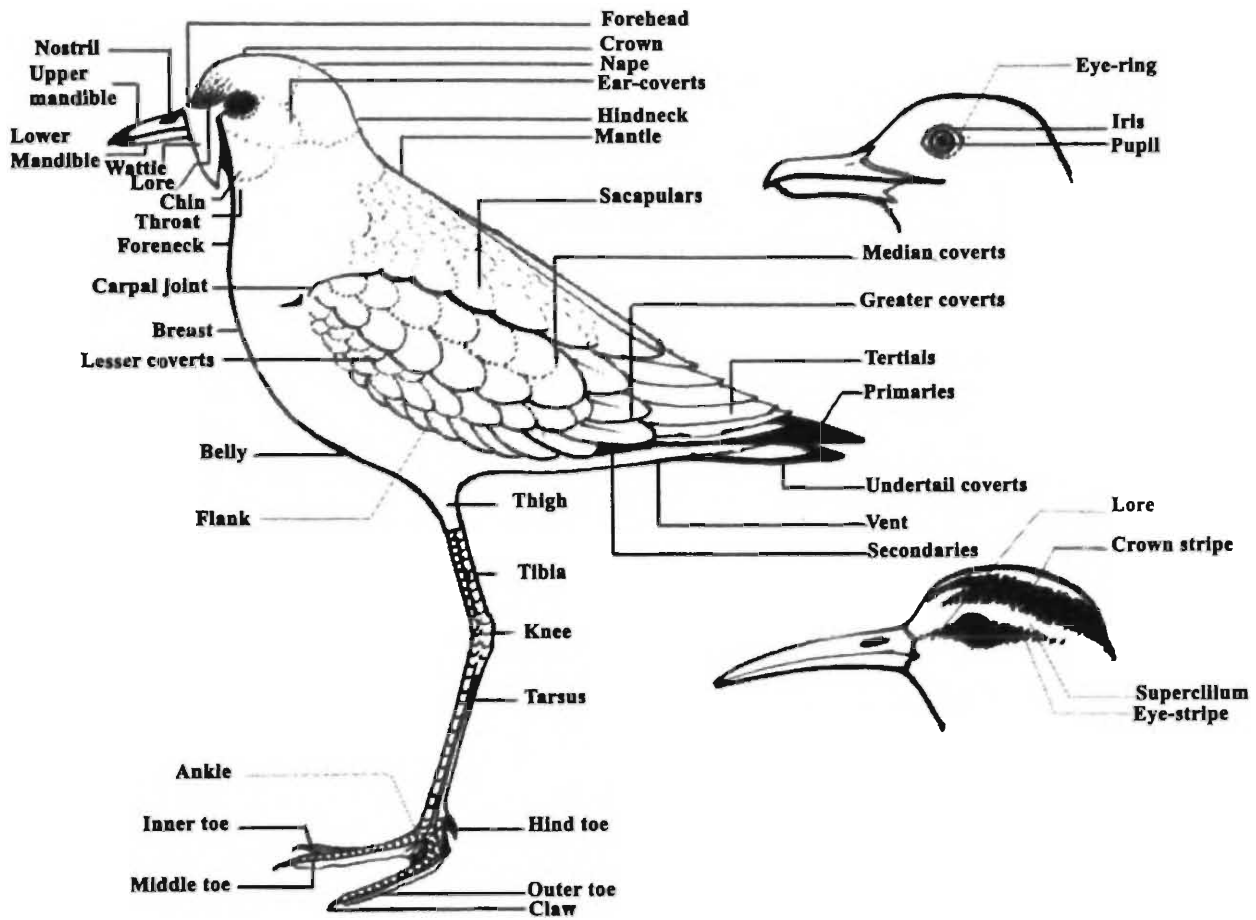
- Larus ichthyaetus* Pallas 1773
- Larus heuglini* Bree, 1876
- Larus brunnicephalus* Jerdon, 1840
- Larus ridibundus* Linnaeus, 1766
- Gelochelidon nilotica* (Gmelin, 1789)
- Sterna caspia* Pallas, 1770
- Sterna aurantia* J.E. Gray, 1831
- Sterna bengalensis* Lesson, 1831
- Sterna bergii* Lichtenstein, 1823
- Sterna sandvicensis* Latham, 1787
- Sterna sumatrana* Raffles, 1822

64 Common Tern (464-465)	<i>Sterna hirundo</i> Linnaeus, 1758
65 Saunders's Tern (477)	<i>Sterna saundersi</i> Hume, 1877
66 White-cheeked Tern (467)	<i>Sterna repressa</i> Hartert, 1916
67 Black-bellied Tern (470)	<i>Sterna acuticauda</i> J.E. Gray, 1831
68 Bridled Tern (471, 472, 473)	<i>Sterna anaethetus</i> Scopoli, 1786
69 Sooty Tern (474)	<i>Sterna fuscata</i> Linnaeus, 1766
70 Whiskered Tern (458)	<i>Chlidonias hybridus</i> (Pallas, 1811)
71 White-winged Black Tern (459)	<i>Chlidonias leucopterus</i> (Temminck, 1815)

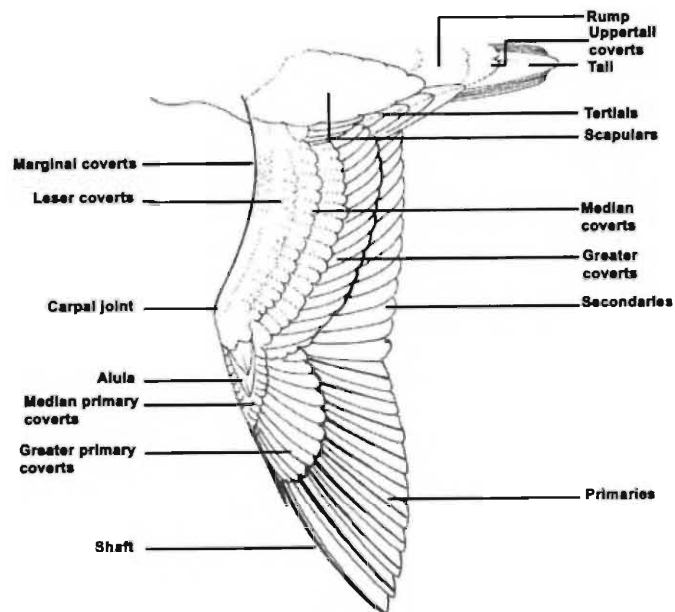
Note : The number in brackets after the common name is the serial number assigned to the species in Ripley (1982).

KERALA

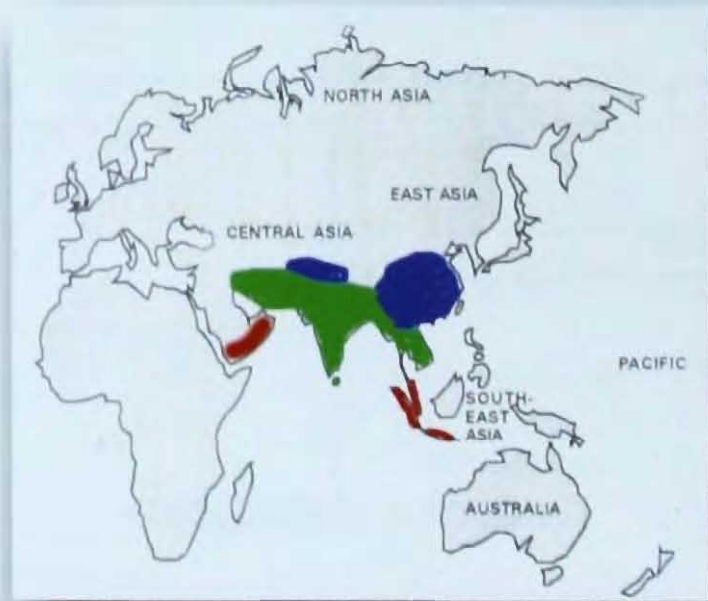




TOPOGRAPHY OF A BIRD



WING OF A SHOREBIRD



1. Pheasant-tailed Jaçana

Hydrophasianus chirurgus (Scopoli)

Vaalan thamarakkozhi

Field characters : Size : (31 cm excluding tail) Spotted Dove. Marsh bird with very long thin toes and seasonal changes in plumage. Sexes alike. Female larger.

Adult breeding : Long drooping pheasant-like blackish-brown tail. Upperparts glossy brown, face and foreneck pure white. Hindneck glossy golden-yellow. Conspicuous white wing-panel on closed wings. In flight shows almost fully white, round wings with black tips; legs trail behind. Underparts dark chocolate brown. Bill slaty-blue, paler at tip. Legs and feet pale bluish-plumbeous. Iris brown

Adult non-breeding : Elongated tail lacking. Upperparts and hindneck brown, foreneck and underparts white. Sides of neck golden yellow. White supercilium. Dark brown eye-stripe from lores continues down the sides of neck to join in front as a breast band. Bill brown with yellow basal half. Legs and feet dull greenish to dull plumbeous. Iris pale yellow.

Juvenile : Like non-breeding, upperparts buff-brown with pale fringes of feathers. Rufous-brown cap, dull buff sides of neck. Breast band indistinct, broken at the centre. First year birds attain partial breeding plumage only.

Voice : In winter, nasal mewing *tewn, tewn*. In breeding season, loud musical *m-e-e-ou, m-e-e-ou*.

Habitat : Affects floating vegetation-covered tanks, inundated paddy fields and marshes.

Habits : Gregarious in winter. Walks about effortlessly over the leaves of water lilies, lotus and other floating vegetation, the long toes spreading its weight over a larger surface. Flight weak, resembling a rail. Food : mainly vegetable matter like seeds, roots; aquatic insects, larvae, molluscs also taken.

Breeding : Season June- September, during the SW monsoon. Female is larger and polyandrous. Male holds territory, incubates the eggs and raises the young. Nest: a small raft of grass or weed stems freely floating or placed on partially submerged vegetation. Sometimes, eggs laid directly on the leaves of aquatic plants like water-lilies. Clutch 4; average size of eggs 37.4 X 27.6 mm; glossy greenish bronze or rufous-brown, unmarked. Incubation period c. 26 days. Two or three broods raised by the male in one season.

Status : Resident with local movements. Once common, has become rare during the last two decades mainly due to habitat destruction. A large flock of 45 birds were seen Cherandathur, Kozhikode district on December 2001.

Distribution : Widespread in India, Pakistan, Bangla Desh, Sri Lanka, Nepal and other parts of S and SE Asia.



2. Bronze-winged Jaçana

Metopidius indicus (Latham)
Naatan thamarakkozhi

Field characters : Size : (male 28 cm, female 31 cm) Spotted Dove.

Adult : Back and wings metallic greenish-bronze, rest of the body glossy black. Conspicuous white supercilium extending downwards to nape. Chestnut-red stubby tail. Bill heavy, greenish-yellow becoming pure yellow at tip, base with red tinge. Legs and feet dull green. Lappet on front bright red. Sexes alike, female larger.

Juvenile : Upperparts dark, but paler than adult, neck buff. Rufous-brown crown and a dull white supercilium. Uppertail-coverts barred white and brown, tail rufous with a black terminal band. Underparts whitish, with rufous tinge.

Voice : Contact call a harsh grunt; also shrill *seek-seeek-seeek*.

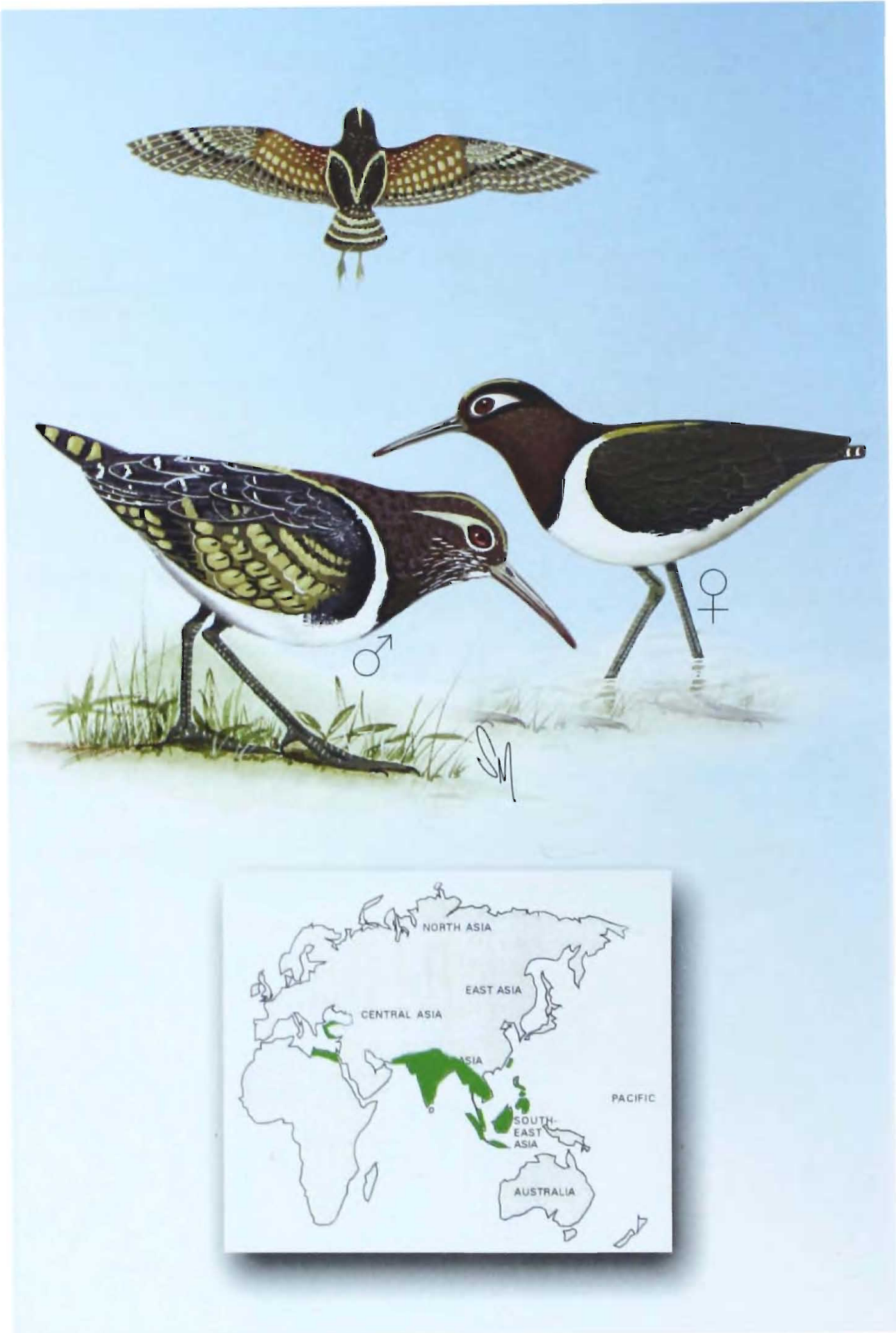
Habitat : Vegetation-covered tanks, paddyfields and marshes, mainly in the plains.

Habits : Similar to Pheasant-tailed. Good swimmer and diver. Confiding in undisturbed areas. Food : mostly vegetarian, also insects, molluscs.

Breeding : Season June-September coinciding with the SW monsoon. Female polyandrous, the male performs all the parental duties. Nest a flimsy pad of grass or weed stems placed on aquatic vegetation; eggs often laid directly on large leaves like lotus. Clutch 4; egg: average size 36.4X25.1 mm; handsome bronze-brown with a jagged arrangement of blackish scribbles.

Status : Resident. Locally common. But in several of its former strongholds, population seems declining.

Distribution: Widely distributed in India, Pakistan, Bangla Desh, Sri Lanka, Nepal and Maldives and parts of S and SE Asia.



3. Greater Painted Snipe

Rostratula benghalensis (Linnaeus)
Kaalikkata

Field Characters : Size : (25cm) Common Sandpiper +. Entirely wetland wader. In flight, dangling legs and rounded wings resemble a rail. Reddish brown beak, down curved at the tip. White or buff eye-ring extends as a streak behind the eye forming a 'spectacle'

Female : chestnut head and neck and throat, black breast contrasting with white below, buff crown stripe. Dark greyish green upper parts, mottled beautifully with golden buff, buff scapulars form a narrow 'V' on mantle. Belly and abdomen white with buff tinge. Tail ashy grey with blackish bars and buff spots.

Male : duller overall, the golden-buff 'V' on mantle more prominent; wing-covets with striking golden-buff spots. Smaller in size.

Juvenile : As adult male.

Voice : Normally silent; soft *kob, kob* like 'the sound produced by blowing softly into a bottle', produced by displaying female. Loud, explosive *kek* when flushed.

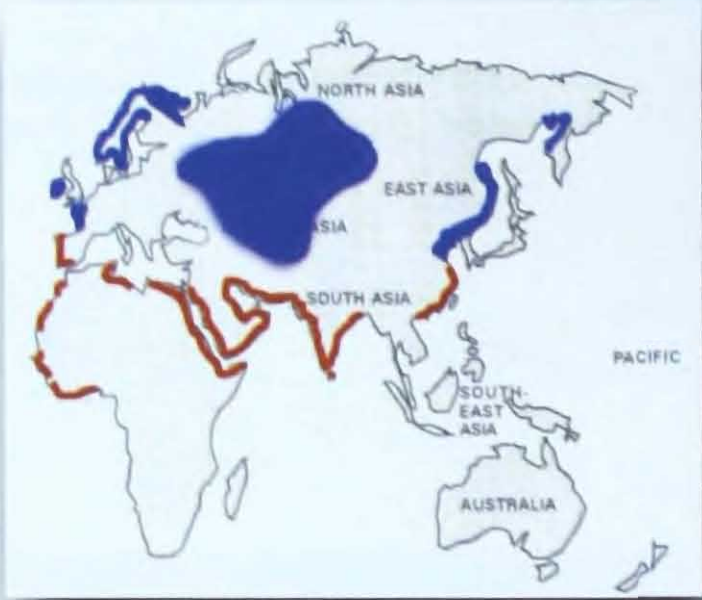
Habitat : Low country with reedy marshes, paddy fields.

Habits : Skulker, takes to wing reluctantly when disturbed, landing into the marsh vegetation a short distance away. Crepuscular. Bobs tail frequently while feeding. Feeds on insects, molluscs, vegetable matter etc. Single or small group of 2-3.

Breeding : December to February, mainly. Polyandrous. Nest a pad of grass and aquatic vegetation with a small depression in centre, placed at the ground in the marsh. After laying, the female finds another mate, the male being entrusted with the parental duties. Clutch-size: 3-4. Breeding recorded at Thiruvannathapuram district (Susanth *et al.*,1986).

Status : Resident. Uncommon.

Distribution : Throughout the Indian subcontinent except Nepal and Andaman and Nicobar Islands. Range extends over Africa south of Sahara, S and SE Asia, Middle East. Breeds throughout its range.



4. Eurasian Oystercatcher

Haematopus ostralegus Linnaeus

Katal mannathi, Kakka theeni

Field characters : Size : (42 cm) Red-wattled Lapwing+, legs shorter. Striking black-and-white wader with long orange-red bill and stout pink legs.

Adult non-breeding : Upperparts dull black; colour of the bare parts duller than in breeding plumage. Bill dark towards tip. White collar on neck above throat for a short period.

Adult breeding : Upperparts, head, neck and breast glossy black; in flight, broad white wing bar, white lower back, rump and upper tail-coverts; black terminal tail band conspicuous. Eyes dark red, eye-ring bright orange-red. Bill paler at tip.

Juvenile : Similar to non-breeding adult, but white neck collar absent or indistinct, upperparts brownish black with brownish buff fringes. Eyes brown, bill dull orange yellow.

Immature (winter) : White neck collar more distinct and broader than adult, but absent in some individuals, upperparts browner, bare parts become brighter by age.

Voice : Shrill piping call.

Habitat : Sandy and rocky coasts, mudflats at estuaries.

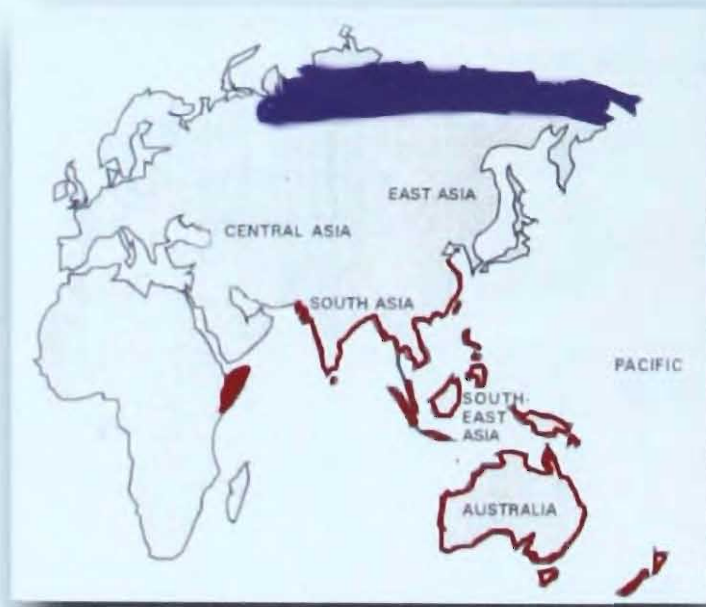
Habits : Feeds on intertidal area associating with other waders. Bivalve molluscs form its main diet, prised open or hammered with powerful bill; also takes crabs, worms and other crustaceans. Unlike other waders, young are fed by the adults.

Status : Winter visitor, uncommon. Not regular, small population of 1-14 seen at certain areas (Matakkara, Kottappuzha estuary, Kozhikode, Kadalundy, Purathur).

Distribution : Winter migrant to the coasts of India, Pakistan, Sri Lanka and Africa. Frequents the west coast than the east, rare vagrant to the inland wetlands. Breeds on the coasts of Europe, Black and Caspian Seas.



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5. Pacific Golden Plover

Pluvialis fulva (Gmelin)

(Eastern Golden Plover)

Pon manalkozhi

Field characters : Size : (24 cm) Yellow-wattled Lapwing A yellow spangled plover with a big head and thick pigeon-like bill.

Adult non-breeding : Upperparts pale brown, speckled bright yellow. Supercilium, face and neck with a yellowish-buff wash. Breast white with a buff tinge, mottled brown and yellow. In flight, **uniform upper parts** without any contrasting pattern, thin wingbar; **smoky-grey underwing** separate it from Grey Plover.

Adult breeding : Blackish-brown upperparts spotted with golden yellow and white, separated from the black underparts (lores to ear coverts, chin, throat foreneck and breast to vent) by a broad white band from forehead running through above the eyes to sides of neck to flanks. Black bill, thin greyish-black legs.

Juvenile : Similar to non-breeding, distinct supercilium pale yellowish-buff, feathers on belly and flanks white with brown tip. Central belly and undertail-coverts white with no marks. Almost inseparable from adult non-breeding after November.

Voice : High pitched whistle *teeh; tee-tew.*

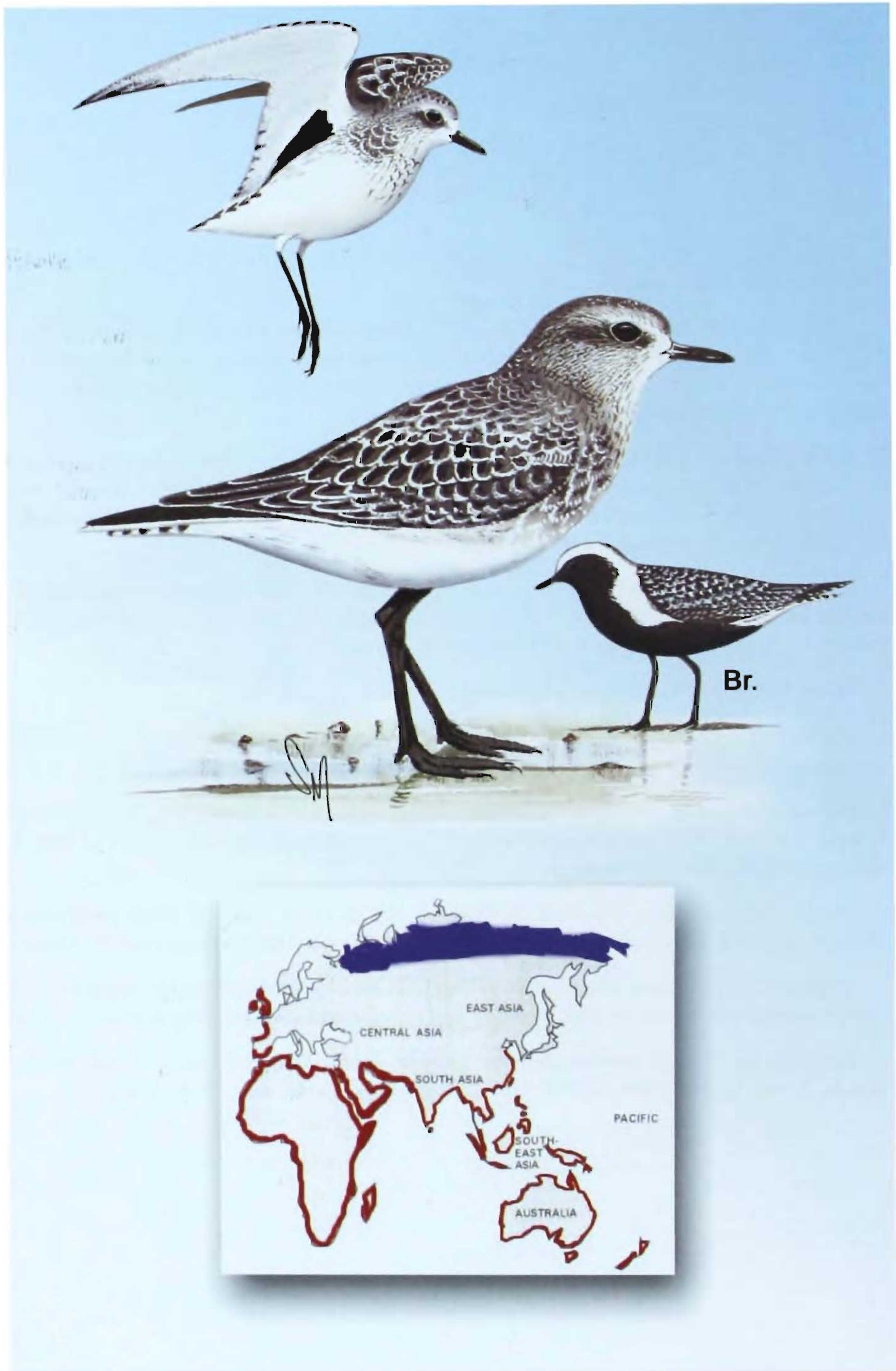
Habitat : Tidal mudflats, ploughed and wet fields, coastal lagoons, edges of lakes, grasslands near the coast.

Habits : Gregarious, groups of 20 or more in association with other waders. Wary and takes to wing as a group when approached. Feeding habits like Grey Plover; food consists of insects, molluscs, worms and crustaceans.

Status : Winter visitor, common. A flock of 100 or more, many of them in breeding plumage, regularly seen over-wintering at Madayipara, Kannur District from June to August.

Migration : Exceptional fliers, birds breeding in Alaska fly 4500 km over the ocean to reach Hawaii islands, one of the longest non-stop flights undertaken by any long distance migrant!

Distribution : Winter migrant to India, Pakistan, Bangla Desh, Sri Lanka, Nepal, Maldives Islands. Breeds in N. Siberia and W. Alaska. Also winters in SE Asia to Australia.



6. Grey Plover

Pluvialis squatarola (Linnaeus)

Chara manalkozhi

Field Characters : Size : (31 cm) Red-wattled Lapwing -. Plump looking greyish plover with a thick black bill and a peculiar hunched up stance.

Adult non-breeding : Upperparts brownish grey with white spots. Obscure eye streak, pale indistinct supercilium, a dark spot on ear coverts, sides of head and neck white with thin brown streaks. Foreneck, breast and flanks white, streaked with brown; rest of underparts white with brown streaks and spots. White underwing with **black axillaries** diagnostic. Tail white, barred grey.

Adult breeding : Upperparts black, generously spotted with silvery-white and blackish-grey. Crown pale; a white band from forehead, extends towards nape and becomes broader at shoulder. Face and underparts from chin to belly jet-black; lower belly and undertail-coverts white. In flight, in both breeding and non-breeding plumages, white wingbar, whitish rump and uppertail-coverts contrast with black primary coverts and carpal area. Bill black, legs dark grey.

Juvenile : As non-breeding, but feathers of upperparts with buff or pale gold edges. Breast and flanks barred and streaked buff-brown.

Voice : Plaintive *tloo-oo-ee*, usually on flight.

Habitat : Mudflats at estuaries, tidal creeks, seashore.

Habits : Ones, twos or small parties along with other shorebirds. Rather sluggish, often seen resting on one leg. Feeds taking zigzag runs, stopping abruptly to pick up prey. Flight rather swift. Food : marine worms, molluscs, insects.

Status : Winter visitor. Uncommon. Earliest date seen at Matakara 30th September, the latest 24th April.

Distribution : A winter migrant to the seaboard of India, Pakistan, Bangla Desh, Sri Lanka, Nepal, Maldives. Breeds on the Arctic tundra of Europe and Asia. Also winters on the coasts of Africa, Madagascar and SE Asia.



7. Common Ringed Plover

Charadrius hiaticula Linnaeus

(Ringed Plover)

Mothirakkozhi

Field characters : Size : (19 cm) Common Sandpiper -. A small, thickset plover with a breast band, a white ring round its neck and a conspicuous white wingbar.

Adult non-breeding : Sandy-brown upperparts, crown pale brown, white forehead continues as a supercilium, a greyish-brown band from lores joins the crown through ear-coverts at nape. White of chin and throat extends to hindneck as a collar. Greyish-brown breast band hardly meeting at the centre, in some cases prominent only as lateral patches at sides of breast; rest of underparts white. In flight, prominent white wingbar diagnostic; white sides of rump, black sub-terminal tail band, underwing and axillaries white.

Adult breeding : **Male** Upperparts and crown brown; black and white face pattern with white forehead and a patch above the eye, a black band from lores to ear-coverts extending as a bar in front of the eyes above the forehead. Chin, throat and hind collar white contrasting strongly with black breast band, which rises above to border the hind neck collar. Rest of the underparts white. **Female** Breast-band thinner in the middle, with a wash of brown at sides. Ear-coverts brownish.

Distinguished from similar Little Ringed Plover by larger size, white wing bar, thicker orange legs, orange-yellow base (duller in non-breeding) of black heavier bill, indistinct eye ring and different call.

Juvenile : Like non-breeding, paler. Buff fringes and sub-terminal bars on feathers of upperparts give a scaly appearance. Brown lateral patches on sides of breast, in some cases joined at the middle. Bill black, legs dull orange-yellow. **Separated from Little Ringed Plover of the same age by larger size, presence of wingbar, lack of prominent eye-ring and brighter leg colour.** Indistinguishable from non-breeding adult by January.

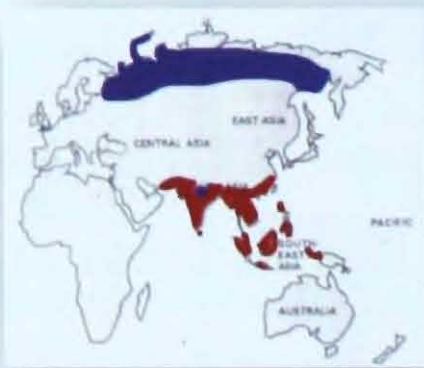
Voice : A distinct soft whistle *too-li*.

Habitat : Coastal wetlands, riverbanks and occasionally paddy fields.

Habits : Gregarious, pairs or loose flocks. Typical plover. Wary, takes off simultaneously as a group when disturbed.

Status : Winter visitor, rare. Sight records at Kuniyan, Kasaragod District and Chempallikkundu, Kannur District.

Distribution : Rare winter visitor in India, Pakistan, Bangla Desh, Sri Lanka, and Maldives. Breeds across the Arctic tundra of N. Siberia. Winters also in the coast of NE Mediterranean and of E. Africa.



C. dubius curonicus



C. dubius jerdoni

8. Little Ringed Plover

Charadrius dubius Scopoli
Aattu manalkkozhi

Field characters : Size : (17 cm), Common Sandpiper -. A typical plover, smaller than the similar Common Ringed Plover; looks less bulky, head smaller.

Adult breeding : Sandy-brown upperparts and brown cap; black mask covering lores to earcoverts and a bar above white forehead. A narrow patch of white above the eye, white chin, throat and a hind collar. Black breast band extending to lower hindneck bordering the white collar. Rest of underparts white. In flight, a very indistinct white bar on uniformly dark wings. Tail with white tip, outer rectrices white and a blackish-brown sub-terminal band, which is broader at the middle. Bright yellow eye-ring, black bill with a little yellow at the base of the lower mandible and greenish yellow or dull pinkish legs.

Adult non-breeding : Black of head replaced by brown, breast band also turns brownish, forehead buffish. This plumage is retained for a short period only.

For differentiation from Common Ringed Plover, see that species.

Juvenile : Like non-breeding, but upperparts with buff fringes and dark sub-terminal bars. Breast band prominent only at the sides, hardly meeting at centre. This plumage retained for only three months after fledging.

Voice : Plaintive, descending *phiu*, distinct from the call of Common Ringed Plover.

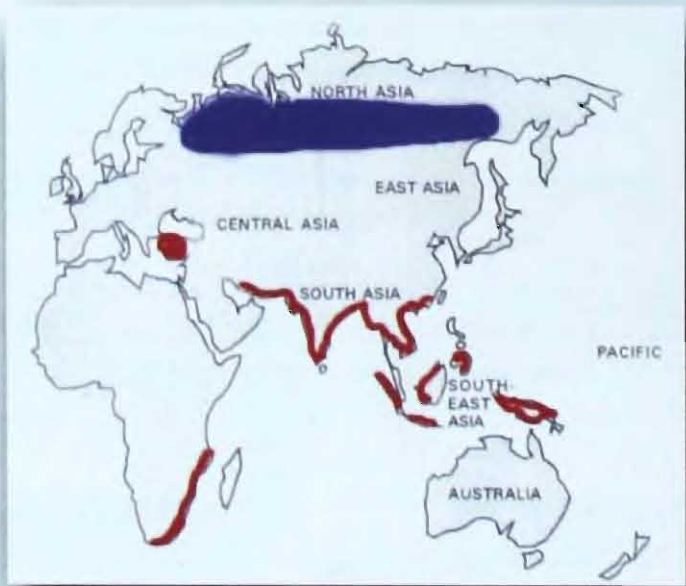
Habitat : Tidal mudflats, estuaries, seashore, riverbanks, paddy fields.

Habits : Pairs or small loose parties, sometimes with other waders. Has a peculiar habit of rapidly tapping the ground with one foot to flush out insects and feeding on them. Otherwise, behaviour characteristic of plovers.

Breeding : March to May. Nest : an unlined depression on the sand or shingle bank. Clutch 4. For a detailed account on the habits and breeding of this species in Kerala, see Neelakantan *et al.* (1992)

Status : Two races (inseparable in field) concern us - *curonicus* is winter visitor and *jerdoni* is resident. Common.

Distribution : The race *curonicus* is a winter visitor to all over India, Pakistan, Bangla Desh, Sri Lanka and Nepal, breeding in Kashmir up to 1500m, Palaearctic Europe, Asia to Siberia and Japan. Winters also in SE Asia. *jerdoni* is resident throughout the Indian subcontinent, Sri Lanka, Maldives and SE Asia.



9. Kentish Plover

Chradrius alexandrinus Linnaeus

Cheru manakkozhi

Field Characters : Size : (17 cm) Common Sandpiper -. A stocky little plover, similar in appearance as the Lesser Sandplover.

Adult non-breeding : Sandy-brown upperparts, crown and ear-coverts. White forehead extends as a supercilium; white lores, hindcollar, chin throat and underparts. Brown clear-cut lateral patches on sides of breast. In flight, broad white wingbar and white sides of uppertail-coverts clearly visible. Tail white, central rectrices brown at base, darker towards tip. **Differentiated from non-breeding Lesser Sandplover by more white on the tail; from non-breeding Little Ringed Plover by blackish legs and lack of eye-ring.**

Adult breeding : Male has crown rufous, forehead white, black bar above forehead extending sideways as an eye-stripe. Lateral patches black. **Female as non-breeding.**

Juvenile : Almost like non-breeding, upperparts with buff fringes giving a scalloped appearance. Breast patches faint. Distinctive only at the early stages.

Voice : Shriill *too-it*; soft *trr* when taking to wings.

Habitat : Seacoast, riverbanks, mudflats.

Habits : Parties or flocks mixed with other waders. Behaviour similar to other small plovers. **Food :** insects, small crabs.

Status : Winter visitor. Uncommon. A small number usually found among large flocks of Lesser Sand Plovers.

Distribution : Frequents the coasts of India, Myanmar, Sri Lanka and Maldives during winter. The race *seebohmie* resident in southern Indian peninsula and Sri Lanka. *alexandrinus* breeds in N India and Pakistan, winters in rest of the subcontinent, Sri Lanka, Lakshadweep and Maldives. Holarctic breeding species. Wintering ground include Mediterranean, S. Africa, SE Asia.



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10. Lesser Sand Plover

Charadrius mongolus Pallas
Pamir manalkozhi

Field characters : Size : (19 cm) Common Sandpiper -. Similar to Greater Sand Plover but smaller.

Adult non-breeding : Greyish-brown upperparts, pale forehead and noticeable supercilium, grey-brown lores. Broad brown lateral patches on sides of breast. White underparts. In flight, white wingbar with almost parallel edges and sides of rump. Bill black, legs dark grey.

For differentiation from Greater Sand Plover, see that species. **Ringed Plover and Kentish Plover** have similar non-breeding plumage but both have white hind collar.

Adult breeding : **Male** Black mask from forehead to ear-coverts, some have very small white patches on forehead. Upperparts brown, crown, nape and hindneck rufous, chestnut breast band running from sides of breast contrasting strongly with white chin and throat and rest of the underparts except for chestnut flanks. **Female** the black mask replaced fully or partially with brown, breast band paler, and rest of the plumage as non-breeding.

Juvenile : As non-breeding, feathers on upperparts with pale sandy-buff fringes and patches on sides of breast buffish; almost impossible to differentiate from non-breeding adults after Oct.

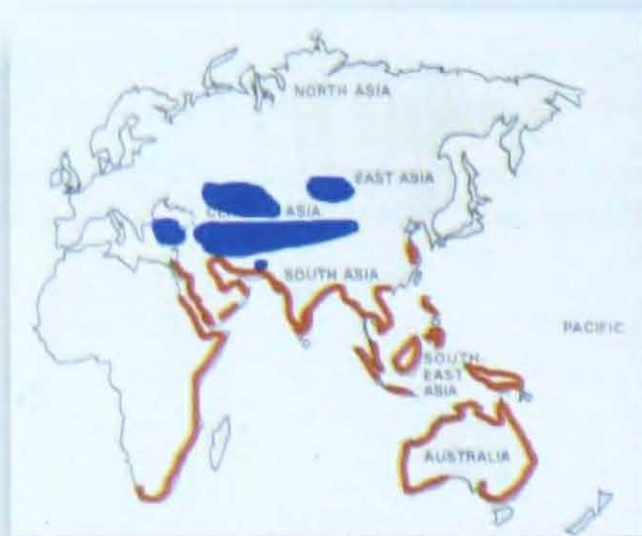
Voice : Rather silent during winter. Soft *trr* or *twip* when taking to wing.

Habitat : Mudflats, seashore, sandbanks.

Habits : Gregarious, flocks of more than 100 on some occasions, in association with other small waders. When tide is high, rests on dry ground in close bunch. Feeds by running fast short distances, stopping abruptly, bending forward to pick up odds and ends. Food : insects, worms, small crabs.

Status : Winter visitor. The commonest shorebird in the region. Regular over-wintering population of more than 200 observed at Madayipara, Kannur District.

Distribution : Winter migrant to coastal areas of India, Pakistan, Bangla Desh, Sri Lanka, Nepal; rarely to the inlands up to 1850m. Breeds in Pamirs, Kashmir, Ladakh, Tibet, NW China.



11. Greater Sand Plover

Charadrius leschenaultii Lesson

(Large Sand Plover)

Valiya manalkozhi*

Field characters : Size : (22 cm) Common Sandpiper+. Usually seen in company of Lesser Sand Plovers and Kentish Plovers, distinctly larger in size and has longer and paler legs and heavier bill.

Adult non-breeding : Sexes alike. Upperparts greyish-brown, broad brown band from lores to ear coverts bordered by white supercilium, white forehead. Greyish-brown lateral patch on sides of breast, in some cases thinly meeting at the centre. Underparts white. Difficult to separate from the Lesser in field but the following features are helpful : i) head usually more or less angular with sloping forehead (Lesser has a rounded head); in flight, ii) more white portions on tail – white sides of rump contrasting with the dark sub-terminal band, iii) the wing bar broader on inner primaries, iv) toes trail well beyond tail tip. Bill black; legs grey, in some cases fleshy, greenish or yellowish.

Adult breeding : **Male** Upperparts grey-brown; crown, nape and a hind collar grey-brown with rufous tinge, extending through sides of breast to join at the centre of breast as a rufous band. Forehead and a broad streak through eyes to ear-coverts black. Chin, throat, sides of neck and underparts below the breast band white. **Female** As non-breeding, but with pale chestnut breast band.

Juvenile : Similar to non-breeding, but upperparts paler, feathers edged buff. Faint buff supercilium. This plumage is donned only for a short period.

Voice : Soft shrill call, *trrrri*.

Habitat : Seashore, coastal mudflats.

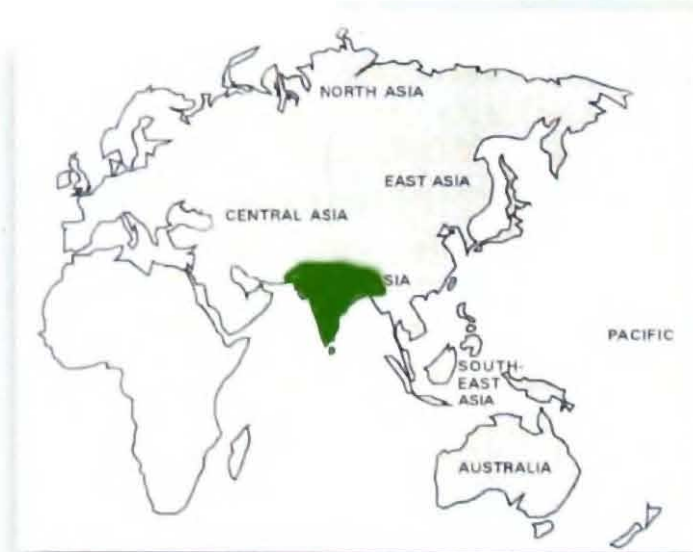
Habits : Small scattered parties in association with other small plovers and sandpipers. Runs around in short spurts stopping frequently to pick up a morsel. Food : insects, worms, small crabs.

Status : Winter visitor, uncommon.

Distribution : Winter migrant to the seashores of India, Pakistan, Bangla Desh, Sri Lanka, Nepal, Maldives. Breeds in C. Asia from Iran to Japan. Also winters on the coasts of S and SE Asia, S Africa and Australia.



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12. Yellow-wattled Lapwing

Vanellus malabaricus (Boddaert)

Manjakkanni thithiri

Field characters : Size : (27 cm) Red-wattled Lapwing -. A black-capped sandy brown lapwing with prominent yellow wattles and yellow legs.

Adult breeding : Black cap from forehead to nape with a white border below as an eye-streak. Yellow wattle from lores, hanging downwards; chin and throat blackish. Upperparts, neck and breast sandy brown; a thin black band borders lower breast, rest of the underparts white. Tail white with a black sub-terminal band. In flight, black primaries and tips of outer secondaries contrast strongly with a white wingbar (formed by the white inner secondaries, base of outer secondaries) and white lower rump and base of tail. Underwing entirely white except for the black primaries and tips of outer secondaries. Bill black with yellow or greenish yellow base, legs bright yellow.

Adult non-breeding : Black cap with brown feathers or very rarely replaced with brown. (This plumage is retained only for a short period during moult.) Chin and throat brown.

Juvenile : Upper parts pale sandy brown, buff fringes and dark brown sub-terminal bars on feathers and brown cap. White chin, throat and upper breast with dark markings. Wattles smaller, dull yellow.

Voice : Plaintive *ti-ee*, a quick repeated *twit-twit-twit twit*... Less vociferous than the Red-wattled Lapwing.

Habitat : Barren land, fallow fields; generally dry biotope.

Habits : Pairs or small parties. More timid than Red-wattled Lapwing, otherwise habits more or less similar.

Breeding : March to August. Nest: a mere scrape, unlined, occasionally encircled with pebbles. Clutch-size : 4.

Status : Not uncommon; but in some areas, e.g. the lateritic midland hillocks of north Kerala where it was known to occur regularly, has become very rare, possibly due to anthropogenic causes.

Distribution : Endemic to Indian subcontinent, locally distributed in India Pakistan, Bangla Desh, Sri Lanka, Nepal.



13. Grey-headed Lapwing

Vanellus cinereus (Blyth)

Charathalayan thithiri*

Field characters : Size : (c.37cm) Red-wattled Lapwing +. A large plain grey brown lapwing.

Adult non-breeding : Head, neck and breast brown with grey wash; chin and throat white with brown streaks. Upperparts brown, coverts with narrow pale tips. Obscure black border below breast, rest of underparts white. In flight, black primaries and subterminal tailband (not present on outermost rectrices) contrast with white uppertail-coverts and secondaries; part of toes project beyond tail tip. Fully white underwing contrasting strongly with black primaries and black tailband. Bill yellow with black tip, small yellow wattle in front of eye, yellow legs.

Adult breeding : Head, neck and breast grey, face paler. Upperparts uniform pale brown. Broad black band below breast.

Juvenile : As adult non-breeding but upperparts extensively fringed white, underparts without the black breastband. Indistinguishable in the field after November.

Voice : Almost silent in winter. A plaintive *chee-it, chee-it*.

Habitat : Marshes, riverbanks, wet ploughed fields.

Habits : Gregarious. Parties of about 5, sometimes flocks up to 50. Habits similar to Red-wattled Lapwing with which it often associates.

Status : Winter visitor, rare. All known sightings from Kole wetlands of Thrissur District (Ravindran and Nameer, 2001).

Distribution : Winter visitor to the N and NE India, straggler to Kashmir, Rajasthan, Kerala and Andaman Nicobar Islands. Breeds in China, Mongolia, Korea, Japan. Also winters in S and SE Asia.



14. Red-wattled Lapwing

Vanellus indicus (Boddaert)

Chenkanni thithiri

Field characters : Size : (33 cm). Grey Partridge +. A noisy plover with black head and breast, red wattles at the base of bill and long yellow legs.

Adult : Head, neck and breast black. Upperparts pale brown, tinged purple especially on the coverts. Sides of neck from behind the eyes white, the broad bands joining white underparts below. In flight, white transverse wing-panel (tips of coverts and one or two inner secondaries), lower rump and base of tail contrast strongly with black primaries, primary coverts, most of the secondaries and sub-terminal tailband. Underwing-coverts and axillaries white. Bill red, tipped black, eye ring and wattle red.

Juvenile : Duller overall. Head with white spots, black replaced by brown. Throat white, sides of neck dirty white. Wattle very small. Difficult to differentiate from adult after post-juvenile moult.

Voice : Loud, penetrating *did-ye-do-it*, repeated frantically.

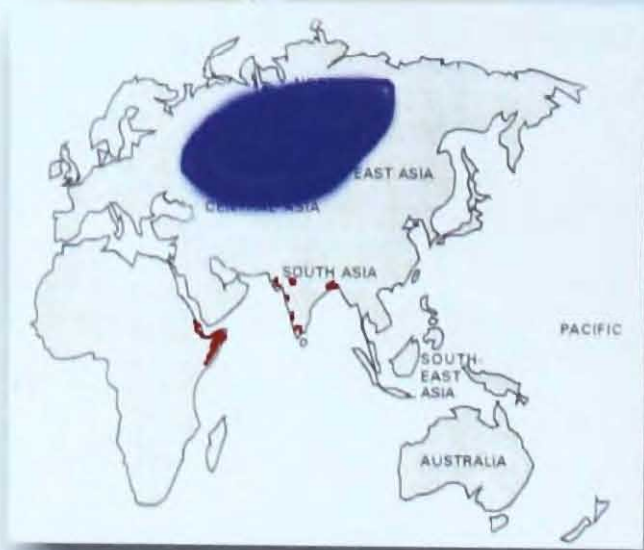
Habitat : In the neighbourhood of water – paddyfields, riverbanks, lateritic plains.

Habits : Pairs or small parties, more active at dawn and dusk, and at night also; rests mostly during the day. Runs about in short spurts, stopping to pick up food. Extremely alert and raises alarm when approached; calling incessantly and dive-bombing at the intruder during breeding season. Food : ants, insects, molluscs etc. and some vegetable matter too.

Breeding : March to August. An unlined scrape, sometimes bordered with pebbles. Clutch-size : 4, usually.

Status : Resident. Common.

Distribution : Throughout India up to 2000m; Pakistan, Bangla Desh, Sri Lanka, Nepal, Bhutan, Myanmar, Middle East and N. Africa



15. Sociable Lapwing

Vanellus gregarius (Pallas)
(Sociable Plover)
Kootta thithiri*

Field characters : Size : (33 cm). Red-wattled Lapwing

Adult non-breeding : Pale grey brown crown, dull buff supercilium, faint line at lore, sides of face pale buffish. Upperparts pale grey-brown. Throat white, neck and breast mottled brownish grey, belly white. In flight, black primaries contrast strongly with white secondaries; lower rump and uppertail-coverts white, tail also white with a broad black subterminal band. Underwing white except for black primaries. Eyes brown, legs and bill black.

Adult breeding : Crown becomes blackish, the supercilium broader and whiter, black eye-stripe from lores towards ear coverts. Upperparts plain greyish brown; Ear coverts, chin and throat buff, neck and breast grey, belly black with a chestnut patch at vent. Wings and tail as in non-breeding adult.

Juvenile : As adult non-breeding, but with streaked crown and scaly upperparts and breast. This plumage retained only till November; impossible to differentiate in field from adult after that.

Voice : Generally silent in winter. In summer, harsh, trisyllabic *krech-krech-krech* (Hayman *et al*, 1989).

Habitat : Dry fallow land, grassland, and ploughed land.

Habits : Single bird or parties. Typical plover, feeding on the ground running with mincing steps. Food : insects, molluscs, worms.

Status : Straggler. **Globally threatened**. The only record more than a century old (Ferguson & Bourdillon, 1903-04) from Thiruvananthapuram.

Distribution : Winter migrant to N and NW India, Pakistan, Bangla Desh, Sri Lanka, Nepal. Rare vagrant to Maldives. Breeds in central and north Asia. Also winters in NE Africa.



16. White-tailed Lapwing

Vanellus leucurus (Lichtenstein)
(White-tailed Plover)
Vellavalan thithiri*

Field characters : Size : (28 cm) Yellow-wattled Lapwing -. Comparable to Yellow-wattled Lapwing in appearance, but without the black cap.

Adult : Head greyish-brown; face, faint supercilium, forehead and chin white. Upperparts greyish-brown with a lilac gloss, a white panel present on closed wings. In flight, conspicuous all-white tail, white uppertail-coverts, lower rump and wing-panel strongly contrasting with darker upperwing-coverts and mantle and predominantly black primaries. Upperbreast dark grey or brownish grey, lowerbreast and abdomen pinkish-buff, rest of the underparts white. Underwing except for black primaries, axillaries and undertail white. Long yellow legs trail well behind tail in flight. Eyes brown to red; bill black, moderately long and thin.

Juvenile : Overall much darker, mostly marked with buff-brown sub-terminal bars and fringes on feathers of upperparts. Tail white with a narrow brown sub-terminal band and buff tip. Neck and breast paler than in adult (this plumage retained only upto October).

Voice : Mostly silent in winter. A subdued *pee-wick*.

Habitat : Marshes, edges of lakes and paddy fields.

Habits : Gregarious, always found near water, in association with other waders. Behaviour similar to Red-wattled Lapwing, but frequently feeds wading in water.

Status : Rare winter visitor. Single sight record from Kole wetlands, Thrissur district (Ravindran, 2001).

Distribution : Winter visitor to N, NW and C. India, straggler to S India; Pakistan, Bangla Desh, Nepal. Breeds in Middle East and parts of N Asia.



17. Eurasian Woodcock

Scolopax rusticola Linnaeus

Prakkata

Field characters : Size : (36 cm) Red-wattled Lapwing, legs shorter bill longer. An unmistakable large snipe with camouflaged plumage, found in moist forest.

Adult : Upperparts brown, black and rufous, spotted and barred in camouflaged pattern. **Crown with transverse bars**. Narrow dark eye-stripe from base of bill through lores ending behind the eyes; buffish brown facial area and a dark line through cheeks. Underside of tail with terminal silver-grey spots. In flight, black sub-terminal tail band, chestnut-brown upper tail and rump; broad rounded wings flapped deliberately and bill pointed downwards. Bill long, slender and pointed, fleshy-brown darker at tip. Legs short, reddish-flesh.

Juvenile : Similar as adult.

Voice : Rather silent during winter.

Habitat : Damp evergreen forests, sholas.

Habits : Solitary. Crepuscular and nocturnal, spends most of the day under cover, inactive. When disturbed, flies off fast, silently, avoiding tree-trunks quite skillfully, though the usual flight is sluggish. The typical honeycomb like markings left behind by the bird, which feeds by probing mud with its bill and, reveal it's presence. Food : worms, insects.

Status : Winter visitor. Rare.

Distribution : Rare winter migrant to hill ranges of India, Pakistan, Bangla Desh, Sri Lanka, Nepal and Bhutan. Breeds in Himalayas between 2000-3800m, Europe, N Asia east to Japan. Also winters in NW Africa, E Eurasia, S and SE Asia.



18. Wood Snipe

Gallinago nemoricola Hodgson

Kattu chundankata

Field characters : Size : (31 cm) Common Sandpiper+. Large snipe occurring at the hill swamps.

Adult : Upperparts blackish with greyish or brownish-buff fringes of feathers; mantle with grey-buff parallel lines. Head brownish-buff consisting of a narrow pale occipital stripe bordered by blackish ones on either side and buffish supercilium. Underparts heavily barred, neck and breast washed brown. In flight, rather rounded wings; brown flight feathers, secondaries with narrow grey tips; tail tipped pale-grey except for the central rectrices. 9 pairs of rectrices usually present. **Typical snipe pattern on head and mantle distinguishes it from Woodcock; greater size and habitat separates it from other snipes of the region. Flight described as 'bat like'.** Bill horny-brown, basal two third of lower mandible yellowish. Legs plumbeous green.

Juvenile : Upperparts looks scaly. Primaries with white tips. Impossible to identify in field.

Voice : Mostly silent, deep *tok-tok* when flushed; also nasal *chek-chek-chek*. **This is an additional diagnostic character.**

Habitat : Swamps, puddles and pools among waist-high grass in hill ranges.

Habits : Generally single or scattered flocks. Like other snipes, probes mud with its long bill. Extremely wary, takes off when flushed and flops into cover about 100m away. Food : worms, aquatic insects.

Status : Winter visitor. Rare. Recorded in February 2004 at Mahendragiri RF, Kanyakumari district, Tamil Nadu. **Endangered, category- vulnerable.**

Distribution : Rare winter visitor to the Himalayan foothills of India, Pakistan, Nepal, Bhutan and also to the hill ranges of southern India, Bangla Desh; vagrant to Sri Lanka and SE Asia. Breeds in Himalayas between 3500-5000m, from Arunachal to east of NW Himachal Pradesh.



19. Pintail Snipe

Gallinago stenura (Bonaparte)

Mulvalan chundankata

Field characters : Size : (27 cm). Common Sandpiper +.

Adult : Typical snipe, confusable with Common Snipe and Swinhoe's Snipe, very difficult to differentiate in the field. Lack of white trailing edge separate it from the Common Snipe. Very similar to the Swinhoe's, the only distinctive feature being the structure of tail – the outer six to nine pairs (out of the total 12 to 14 pairs of rectrices) are reduced to pin shape (hence the name); but this is noticeable in the field only in perfect circumstances. Upperparts with narrow buff fringes of feathers. Eye streak from lores narrow, supercilium broad above lores. Underparts extensively barred excluding belly, flanks streaked. Dark, heavily barred underwing-coverts and axillaries. Bill relatively shorter than other snipes, dark brown with greenish base. Legs greyish green.

Juvenile : Like adult, but with very narrow fringes on upperpart.

Voice : A rasping *squak* or nasal *scape* when flushed.

Habitat : Wet paddy fields, coastal and inland marshes, edges of backwaters and often on drier ground also.

Habits : Singly or in groups of 3 or 4. Cryptic colouration makes it difficult to locate. When disturbed, flies off suddenly, uttering the distinctive call note, in a rapid zigzag. Generally crepuscular and nocturnal, less active during sunny days. Food : molluscs, worms.

Status : Winter visitor. Common.

Distribution : A winter migrant to all over India up to 2500m; Pakistan, Bangla Desh, Sri Lanka, Nepal and Maldives. Breeds in E. Siberia and N. Tibet. Also winters in S and SE Asia.



20. Swinhoe's Snipe

Gallinago megala Swinhoe
Swinhoe chundankata

Field characters : Size : (29 cm) Common Sandpiper+.

Adult : Inseparable in the field from Pintail Snipe, but slightly larger with longer tail extending beyond closed wing tips and has more white on the corner of the tail (small white tip of the outermost feathers). Ten pairs of rectrices present usually. In flight, toes trail well beyond tail-tip than on Pintail.

Juvenile : Like adult.

Voice : Flushing call less harsh than Pintail.

Habitat : Marshy shores of lakes, backwaters, paddy fields.

Habits : Same as of Pintail Snipe.

Status : Winter visitor. Rare. No recent published records since the early records in the first half of 20th century (Baker & Inglis, 1930; Kinnear & Whistler, 1930-1937).

Distribution : Rare winter migrant to India, Sri Lanka and Maldives. Breeds in E and C Asia. Also winters in S and SE Asia.



21. Common Snipe

Gallinago gallinago (Linnaeus)
(Fantail Snipe)
Visaryvalan chundankata

Field characters : Size : (27 cm) Common Sandpiper+.

Adult : Upperparts blackish and dark brown, with reddish brown and buff streaks and bars. Broad buff stripes on mantle and scapulars. Crown dark brown with a prominent buff occipital stripe; buff supercilium broadest in front of the eyes, dark stripe at lores. Chin and throat buffish white; breast brown with buff tinge and streaked brown, belly white, flanks streaked brown. Tail dark brown, narrowly tipped white. **In flight, broad white trailing edge on inner wing and more white on tips of outer rectrices, along with the large white belly patch and paler underwing separate it from Pintail and Swinhoe's snipes.** Bill dark brown with reddish base, legs dull olive green, yellowish in summer.

Juvenile : Like adult, feathers on mantle and wing-coverts white fringed.

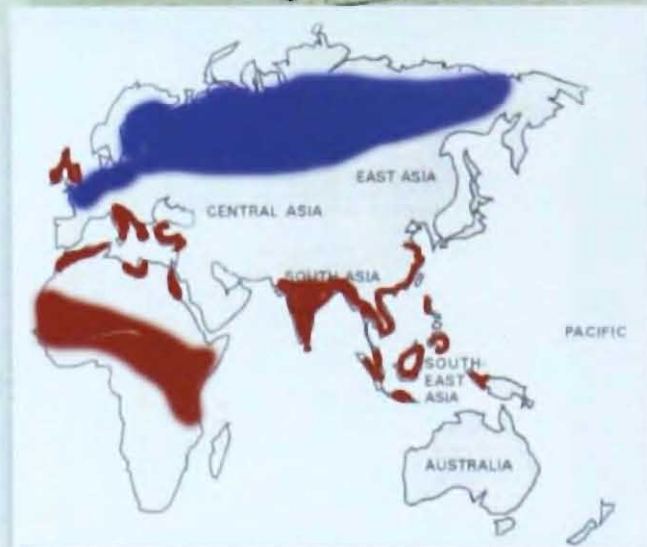
Voice : Harsh *scaap* when flushed, almost indistinguishable from the call of Pintail Snipe.

Habitat : Wet paddy fields, swampy edge of backwaters.

Habits : Similar to those of Pintail Snipe but **prefers more soft mud** to feed on. Singly or in small flocks.

Status : Winter visitor. Common.

Distribution : Common winter visitor to all over India, Pakistan, Bangla Desh, Sri Lanka, Nepal, Bhutan and Maldives. Breeds in Kashmir, Ladakh and Garhwal between 1600 and 4500m; Europe, Asia east to western Siberia and Britain. Also winters in N and E Africa, Middle East and S and SE Asia.



22. Jack Snipe

Lymnocyptes minimus (Brunnich)

Cheriyā chundankata

Field characters : Size : (21 cm) Common Sandpiper -. The smallest of our snipes; shorter bill and narrow wings.

Adult : Upperparts brownish black with purple and green gloss. Four clear broad buff stripes on back. Scapulars and upper wing-coverts brown with buff markings. Blackish brown crown with paler spots, buffish double supercilia with a dark stripe in between and a dark eye streak beginning from lores. Sides of face buffish white with a dark indistinct stripe at the middle. **No crown stripe.** Chin and throat whitish buff; neck, breast and anterior flanks with brownish wash, streaked darker. Rest of the underparts white. In flight, all dark wedge-shaped tail (12 rectrices) and narrow white trailing edge of wings visible. Underwing-coverts and axillaries grey-white sparingly streaked brown. Bill with black tip, becoming paler towards fleshy base; legs olive green, occasionally tinged yellowish.

Juvenile : Same as adult.

Voice : Generally silent in winter, even when flushed.

Habitat : Waterlogged paddy fields, swampy edge of backwaters.

Habits : Found singly. When approached very close, goes up without any sound and drops to cover a short distance away. Food : worms, molluscs, insects.

Status : Winter visitor. Uncommon. A single over-wintering record at Madayipara in June 1993.

Distribution : Occasional winter visitor to almost throughout India, Pakistan, Bangla Desh, Sri Lanka, Nepal and Maldives. Breeds in N Europe and N Asia. Also winters in N Africa, Middle East, S Europe, S and SE Asia.



23. Black-tailed Godwit

Limosa limosa (Linnaeus)

Pattavalan godwit

Field characters : Size : (50 cm) Village hen. A lanky wader with long almost straight bill. Black distal half of tail, white rump and wingbars conspicuous in flight and distinguishes it from similar Bar-tailed Godwit.

Adult non-breeding : Uniform pale grey-brown upperparts, ill-defined pale supercilium. Neck and breast greyish, rest of the underparts white. **In flight, white lower rump, upper tail-coverts, base of tail and broad wingbar contrast strikingly with black distal tail and trailing edge of wings.** Feet trail well beyond the tail-tip. Underwing and axillaries white. Dark bill with pinkish-brown at base; legs greyish-green. Male with shorter bill and legs.

Adult breeding : **Male** Head, neck and breast pale rufous; upperparts spotted grey, black or reddish. Chin, throat and abdomen white; flanks and lower breast rufous with brown barring. **Female** Similar but larger in size; has rufous parts paler with white spotting. Base of bill orange.

Juvenile : Like adult non-breeding, with buff fringes on feathers of upperparts; cinnamon wash on head, neck and breast. Can be separated from adult non-breeding till Dec..

Voice : Rather silent in winter, a subdued *wit-wit-wit* while taking to wing.

Habitat : Inland water bodies, estuaries, tidal creeks, back waters. Found both in fresh water and brackish habitats.

Habits : Gregarious, sometimes groups of hundreds but seen singly too. Feeds by probing, wading in belly deep water at times. Food : crustaceans, molluscs, worms, seeds of grass and marsh plants. Quite fast on wing.

Status : Winter visitor. Uncommon. Occasionally seen in large flocks.

Distribution : Winter visitor to India, Pakistan, Bangla Desh, Sri Lanka, Nepal, Maldives. Breeds in N and C Europe and W. Asia. Also winters in Mediterranean, S Africa and S and SE Asia.



24. Bar-tailed Godwit

Limosa lapponica (Linnaeus)

Varavalan Godwit

Field characters : Size : (36 cm) Village hen. Similar to the Black-tailed Godwit, but tail is barred, wingbar absent, bill slightly up-curved and legs shorter. Forehead is steeper and the bird appears dumber.

Adult non-breeding : Grey-brown upperparts, darker shafts of feathers give a streaked appearance. Clear whitish supercilium. Rump and uppertail with brown bars in white background. Sides of breast thinly streaked brown, rest of the underparts whitish. No apparent wingbar; white edges of secondaries appear as a thin line. **Underwing white and axillaries thinly barred brown, another feature distinguishing this species from Black-tailed.** In flight, legs trail lesser than those of Black-tailed. Bill horny brown or blackish, basal half pinkish flesh; legs greenish grey to black.

Adult breeding : **Male** Head, neck and underparts chestnut-red. **Female** chestnut-red parts paler overall than in male.

Juvenile : Upperparts brown with buff edges of feathers; breast with strong buff wash, rest of the underparts whitish.

Voice : Relatively silent in winter. Otherwise, sharp *kak-kak* or *kirruk*.

Habitat : Coastal mudflats, seashore, estuaries, mostly saltwater wetlands.

Habits : More or less similar to the Black-tailed. Gregarious, often in company of other waders. Food : molluscs, insects, marine worms.

Status : Winter visitor, common. Small flocks seen throughout the season in regular wintering areas.

Distribution : Winter visitor mainly to the coasts of India and Pakistan. Also recorded in inland waters. Straggler to Sri Lanka and Maldives. Breeds in the Holarctic region. Also winters in tropical Africa and Middle East.



25. Whimbrel

Numenius phaeopus (Linnaeus)

Thettikkokkan

Field characters : Size : (43cm) Village hen. A large wader with long down-curved bill and striped head; smaller than the similar Eurasian Curlew.

Adult breeding and non-breeding : Sandy-brown upperparts, feathers serrated and edged and speckled whitish and buffish. **Head pattern** – consisting of a dark brown crown with a white median stripe and bordered by long buff supercilia and dark eye-stripe – **diagnostic**. Lower back and rump white forming a conspicuous V in flight, tail grey-brown barred blackish. Chin, throat and abdomen white, rest of the underparts streaked brown, undertail and flanks barred brown. Underwing-coverts and axillaries generally white, some have thin brown barring. Bill blackish brown, fleshy pink at the base of lower mandible, straight at base, sharply decurved at distal two-thirds; legs greenish grey. **Differentiated from the similar looking Eurasian Curlew by shorter beak, white supercilium and median stripe.**

Juvenile : Like adult but with buff spots on upperwing-coverts, scapulars and tertials. Breast buff with narrow streaks; white of lower back, rump and uppertail-coverts with narrow brown scalloping. Distinct till November only.

Voice : A rapid whistle *tetti-tetti-tetti-tet*, unmistakable and diagnostic.

Habitat : Tidal mudflats, mangroves, seashore, occasionally inland wetlands also.

Habits : Gregarious. Probes with its long bill to catch crabs and worms from holes on the mudflats.

Status : Winter visitor. Common. Large numbers seen in the seacoast of north Kerala during migratory movements in September and again in April. 2-7 birds regularly seen overwintering at Madayipara.

Distribution : A winter visitor to the coasts of India mainly to the west coast, Pakistan, Bangla Desh, Sri Lanka, Nepal, Bhutan, Lakshadweep, Andaman and Nicobar islands and Maldives. Breeds in N Europe to western Siberia. Winters throughout Africa, Middle East, S and SE Asia.



26. Eurasian Curlew

Numenius arquata (Linnaeus)

Valkkokkan

Field characters : Size : (58 cm) Village hen +. Large sandy-brown wader with a long decurved bill. Larger than Whimbrel, but without its head pattern and has longer bill.

Adult breeding : Upperparts grey-brown, feathers with paler edges, uniform grey brown head with a clear narrow supercilium. Lower back and rump white, conspicuous in flight. Tail barred dark brown in white. Underparts whitish, breast with buffish tinge, streaked brown; flanks marked with brown V shapes and crosses. Underwing almost unspotted, white axillaries contrast with flanks. Bill dark brown, basal half fleshy; legs bluish-grey.

Adult non-breeding : Similar to breeding, but breast grey-brown. Sexes alike, but male has shorter bill than the female.

Juvenile : Upper parts scalloped buff, breast more buffish, and streaks on underparts narrower. Bill shorter. Could be separated in field only until Nov..

Voice : Plaintive shrill *courlee*. Distinctive.

Habitat : Tidal mudflats, seashore, mangroves, backwaters.

Habits : Single or small parties in association with other waders. Feeds by probing using its long bill and also picks food from the surface. Food : crustaceans, insects, mudskippers.

Status : Winter visitor. Common. 25 birds seen at Matakara on 28/11/1986.

Distribution : Winter visitor to the coasts of India, Pakistan, Bangla Desh, Sri Lanka and Maldives. Breeds in the Palearctic up to western Siberia. Also winters in E. Africa, S and SE Asia.



27. Spotted Redshank

Tringa erythropus (Pallas)

Pulli chorakkali*

Field characters : Size : (33 cm) Yellow-wattled Lapwing. Similar in appearance as Common Redshank, but larger in size, longer bill and legs and dark secondaries.

Adult non-breeding : Upperparts plain pale grey, scapulars grey-brown with white fringes and brown sub-terminal bars. Head and hindneck ashy-brown, long white supercilium and white cheeks contrast with black eye stripe from lores to behind eyes. Underparts white, foreneck and breast lightly spotted and streaked brown. **In flight, very pale trailing panel on dark wings (Common Redshank shows a striking white trailing edge), white lower back appears as a long narrow oval patch on back, rump and tail barred black in white. Feet trail behind tail, longer than in Common Redshank. Underwing white, flight feathers darker than coverts. Bill Black, red at base. Legs orange-red.**

Adult breeding : Head, neck and upperparts black, scapulars notched white. Underparts also black, belly whitish. Legs dark reddish-brown. In spring and autumn, may be seen in transitional plumage with black and white blotches.

Juvenile : Almost like non-breeding adult, upperparts brownish, underparts below throat thinly barred brownish-grey in pale grey. Distinguishable till November.

Voice : Shrill piping *tu-it* almost indistinguishable from the call of Common Redshank.

Habitat : Tidal mudflats and also inland freshwater marshes.

Habits : Single or small parties. Feeding habits similar to those of Common Redshank, but sometimes feeds in deeper water. Food : crustaceans, molluscs, worms, insects, small fish.

Status : Winter visitor. Rare. Single published record at Pallipuram, Thiruvananthapuram (Rafeek, 1995). An adult in breeding plumage seen at Koondakulam, Tirunelveli district, Tamil Nadu on 25/04/2004.

Distribution : Uncommon winter visitor of much of India, Pakistan, Bangla Desh, Sri Lanka, Nepal. Breeds north of Arctic Circle in Scandinavia and N. Asia. Also winters in S. Africa and S and SE Asia.



28. Common Redshank

Tringa totanus (Linnaeus)

Chorakkali

Field characters : Size : (28 cm) Yellow-wattled Lapwing. Medium sized wader with striking red legs and conspicuous white trailing edge of wings.

Adult non-breeding : Greyish-brown upperparts, white lower back and rump, white tail with fine brown barring. Foreneck and breast washed brown, with fine dark streaks; rest of the underparts white with dark streaking including flanks and undertail-coverts. **In flight, conspicuous white trailing edge of wings formed by wholly white secondaries and white tips of inner primaries diagnostic.** Bill black, base orange (especially bright in breeding). Orange-red legs trail behind tail in flight. White eye-ring.

Adult breeding : Upperparts brownish or cinnamon with streaks and spots of black and buff. Head, neck breast, flanks and belly with dark brown spots and streaks. Individuals vary highly in plumage.

Juvenile : Brown upperparts, heavily speckled and notched buff. Underparts densely streaked dark brown in white. Could be aged in the field till October.

Voice : Shrill *tiwee-tiwee-tiwee*.

Habitat : Seashore, estuaries, tidal mudflats, riverbanks.

Habits : Single, small parties or large flocks. When alarmed, bobs head and pumps rear parts, typical of the genus *Tringa*. Runs about on mudflats taking food from surface or from shallow water. Food : molluscs, crustaceans, insects.

Status : Winter visitor. Common. Groups of more than 100 regularly observed at various wetlands in north Kerala, not so numerous in the southern parts. Flocks of 50-100 numbers regularly over-winter at Madayipara.

Distribution : Winter visitor to the entire India, Pakistan, Bangla Desh, Sri Lanka, Nepal and Maldives. Breeds in Kashmir and Ladakh between 4000 – 5000m and other parts of C and E Asia. Also winters in S and SE Asia.



29. Marsh Sandpiper

Tringa stagnatilis (Bechstein)
Chathuppan

Field characters : Size : (25 cm) Yellow-wattled Lapwing -. Pale grey, medium sized, wader with very slender, long legs and bill. Slimmer and more graceful than the similar Greenshank.

Adult non-breeding : Greyish-brown overall, streaked crown, prominent white supercilium and faint eye-streak. Scapulars and mantle grey with feathers edged white, wing coverts darker. Underparts whitish; face, foreneck and centre of breast pure white. In flight, dark wings with no bar contrast with white back and rump; white tail narrowly barred brown, **whole feet trail behind tail**; only part of toes trail in the case of Greenshank. Bill blackish, legs olive-green.

Adult breeding : Upperparts darker, with dark brown centre of grey feathers giving a mottled appearance. Underparts white, breast spotted and flanks barred brown. Legs with yellowish tinge.

Juvenile : Like adult non-breeding, brown streaks on head and hindneck. Feathers of upperpart with buff fringes and narrow sub-terminal bars. Juvenile plumage distinct till October.

Voice : Rather silent in winter. A shrill piping call *che-weep, che-weep* while taking off.

Habitat : Fresh water marshes, paddy fields, tidal mudflats.

Habits : Small flocks usually. Feeds in slushy mud methodically, probing with its beak; sometimes in shallow water with bill and whole of head submerged. Food : molluscs, crustaceans, insects.

Status: Winter visitor. Uncommon.

Distribution : Winter visitor to the wetlands of India, Pakistan, Bangla Desh, Sri Lanka, Nepal and Maldives. Breeds south of 56° N latitude in SE Europe and C and S Russia. Also winters in Africa, Middle East, S and SE Asia and Australia.



30. Common Greenshank

Tringa nebularia (Gunner)

Pachakkali

Field characters : Size : (36 cm) Red-wattled Lapwing +. Medium sized plover with pale grey overall and green legs. Plumper than similar Marsh Sandpiper.

Adult non-breeding : Upperparts greyish-brown, head and neck pale with narrow streaks on crown and hindneck. Scapulars and coverts fringed white. Underparts white. In flight, white back and rump, pale tail with very thin barring contrast sharply with dark inner wing and darker outer wing. Toes project a little behind tail. Bill horny-brown, slightly up-turned; legs olive green or yellowish green.

Adult breeding : Darker upperparts, coverts dark grey with white fringes, scapulars with black centres. Head, neck upper breast and flanks streaked and spotted brown. Underparts white.

Juvenile : Browner overall, buff edges of feathers obvious. Neck and breast heavily streaked. Distinct till October.

Voice : Piping call *tew- tew- tew* when flushed, Similar to the call of Redshank, but lower in pitch.

Habitat : Tidal mudflats, riverbanks, paddy fields, inland marshes.

Habits : Single or small parties. Feeds mostly at the water's edge, sometimes wading in shallow water. When wary, bobs head and rear end before taking to flight. Associates with other waders especially Common Redshank. Food : Crustaceans, molluscs, aquatic insects, worms.

Status : Winter visitor. Common. 15-30 seen regularly at Matakara, larger flocks of more than 50 recorded at Kadalundy.

Distribution : Common winter visitor to the different wetlands of India, Pakistan, Bangla Desh, Sri Lanka, Nepal, Bhutan and Maldives. Breeds in N Europe and across N Asia south to 55° N latitude. Winters in the Mediterranean countries, Africa and eastward through SE Asia to Australia and New Zealand.



31. Green Sandpiper

Tringa ochropus Linnaeus
Karimpan katakkokku

Field characters : Size : (24 cm) Common Sandpiper +. A dark sandpiper with a strikingly white rump.

Adult non-breeding : Upperparts blackish-brown with a bronze green sheen, marked with faint buff spots. Head and neck ashy brown. White eye-ring and a short white anterior supercilium, a dark line through lores. Underparts white with brown streaking at breast. **In flight, pure white rump contrast strikingly with dark pointed wings and white tail with a few broad dark brown bars; similar Wood Sandpiper shows less contrast. Only tip of toes trail behind tail.** Underwing also black, contrasting with the white underparts. Bill greenish with black tip. Legs olive green or dull greenish-brown.

Adult breeding : Whitish spots on upperparts. Head and breast darker, crown and sides of face streaked brown, streaks on neck and breast broad.

Juvenile : Like adult non-breeding, darker upperparts with buff spots. Narrow streaks on breast. Similar to adult after Nov..

Voice : Shrill *twee-twee-twee* when flushed.

Habitat : Mainly inland fresh water habitats. Lakes, tanks, paddy fields, marshes.

Habits : Solitary or separated small groups of 2 or 3. Typical sandpiper; runs about at the water's edge, probing in the mud. Quite wary and shows the bobbing behaviour. Food : crustaceans, molluscs, aquatic insects, worms.

Status : Winter visitor. Common.

Distribution : Winter visitor to throughout India up to 2300 m in high ranges; Pakistan, Bangla Desh, Sri Lanka, Nepal, Bhutan. Breeds in Europe and Asia, north to Arctic circle up to 68° N. Also winters in British Isles, Mediterranean, S Africa, S and SE Asia. A specimen recovered from Kottayam, Kerala in 1933 was ringed by the Bureau of Bird Banding, Moscow near Kazan city (55° 48' N and 49 °26' E) in 1929 – a distance of more than 5400 km between two points.



32. Wood Sandpiper

Tringa glareola Linnaeus
Pully katakkokku

Field characters : Size : (21 cm) Common Sandpiper. Slender and graceful sandpiper, similar to Green Sandpiper, paler.

Adult non-breeding : Upperparts greyish-brown, with indistinct whitish and dark spots; clear pale supercilium extending behind the eye. Breast with grey wash, rest of the underparts white. In flight, white lower back and rump, white tail thinly barred black contrast with darker wings and upperparts. Shaft of outer primary white. Feet trail behind tail tip (see Green Sandpiper). Underwing and axillaries white with brown barring. Bill blackish; legs yellowish brown or greenish, longer and paler than those of Green Sandpiper.

Adult breeding : Similar to non-breeding, upperparts dark brownish-black, white and pale brown spots clear. Eyebrow more distinct, throat pale, breast with brown streaks. Barred flanks.

Juvenile : Brown upperparts with clear buff spots. Well-defined supercilium. Breast with buff tinge, narrowly streaked brown.

Voice : Rapid *chip, chip, chip* also high-pitched *pee-pee-pee* when flushed.

Habitat : Tidal mudflats, waterlogged paddy fields, edges of jheels, mangroves.

Habits : Gregarious, small parties or large flocks usually, sometimes single too. Feeds on surface or at times in shallow water, belly deep, probing mud with head submerged. When flushed, rises straight up, emitting the distinctive call. Food : molluscs, crustaceans, worms, aquatic insects.

Status : Winter visitor. Common. In north Kerala, a spurt in population usually in April noticeable.

Distribution : Winter visitor to all over India, Pakistan, Bangla Desh, Sri Lanka, Nepal, Bhutan and Maldives. Breeds in Europe and N Asia. Also winters in Africa, S and SE Asia up to Australia.



33. Terek Sandpiper

Xenus cinereus (Latham)

(*Tringa terek*)

Terek manaloothi

Field characters : Size : (24 cm) Common Sandpiper +. A very active sandpiper with upcurved bill and short orange-yellow legs positioned at the posterior part of the body.

Adult non-breeding : Upperparts uniform pale grey-brown. Show blackish shoulder patch. Whitish forehead, white supercilium apparent at the anterior part. Underparts whitish. In flight, white trailing edge of secondaries contrast strikingly with their black base, paler median coverts show as a wing panel on the dark wing; rump and upper tail ashy-brown. Wings rather stiff while flying. Tapering, upcurved black bill with orange-yellow base, legs orange-yellow.

Adult breeding : Grey-brown upperparts, dark centres of feathers at scapulars appear as distinct black lines. Thinly streaked grey lateral breast patches.

Juvenile : Upperparts darker and browner, appears barred and speckled buff. Less distinct scapular lines.

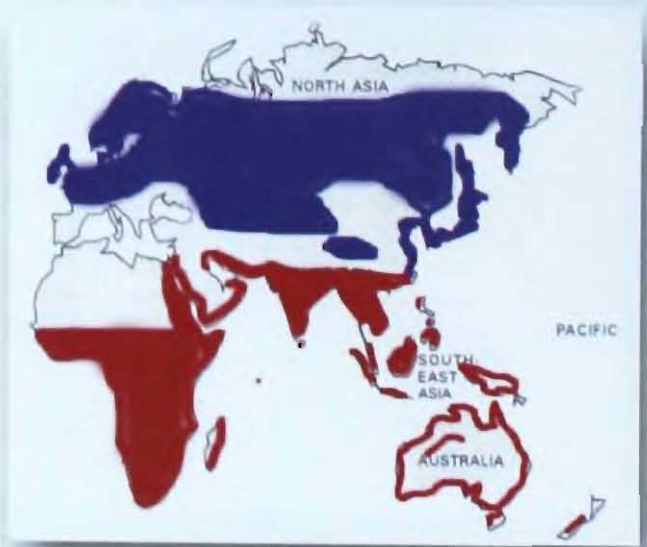
Voice : Soft twittering *twit-twit-twit*.

Habitat : Seashore, mangrove swamps, coastal lagoons, tidal mudflats and creeks.

Habits : Singly, pairs or small parties in association with other waders. Runs about very actively, feeding on the sand banks or mudflats, probing below the surface with fully immersed bill. Usually washes its prey before eating. Food : crustaceans, molluscs, insects.

Status : Regular winter visitor to north Kerala. Uncommon. Earliest sight records for the season in the first week of August.

Distribution : Winter visitor to the seaboard of India, Pakistan, Bangla Desh, Sri Lanka, Nepal and Maldives. Rarely inland to the some parts of N India during migration. Breeds in N Russia to Siberia locally up to 70° N. Also winters in E Africa, S and SE Asia up to Australia.



34. Common Sandpiper

Actitis hypoleucos Linnaeus

(*Tringa hypoleucos*)

Neerkkada

Field characters : Size : (21 cm) Common Myna – A grey-brown sandpiper flying on stiff wings. Perpetually bobs its tail end while feeding.

Adult non-breeding : Upperparts olive-brown. Pale indistinct whitish supercilium, ashy-brown sides of head and neck, streaked dark brown. Grey-brown lateral breast patch present, rest of the underparts white. In flight, shows a conspicuous white wing bar virtually along the full length of the wings, brown rump and tail, outer tail feathers white. Underwing shows a broad black trailing edge and two black bands on the white underwing coverts. Bill horny brown, greyer or greenish at the base of the lower mandible, legs greenish-grey.

Adult breeding : Upperparts darker with a slight olive gloss, darker shaft streaks and thin barring on feathers. Lateral breast patches more distinct and darker, nearly as a breast band.

Juvenile : Coverts browner with buff barrings. Aging in field difficult.

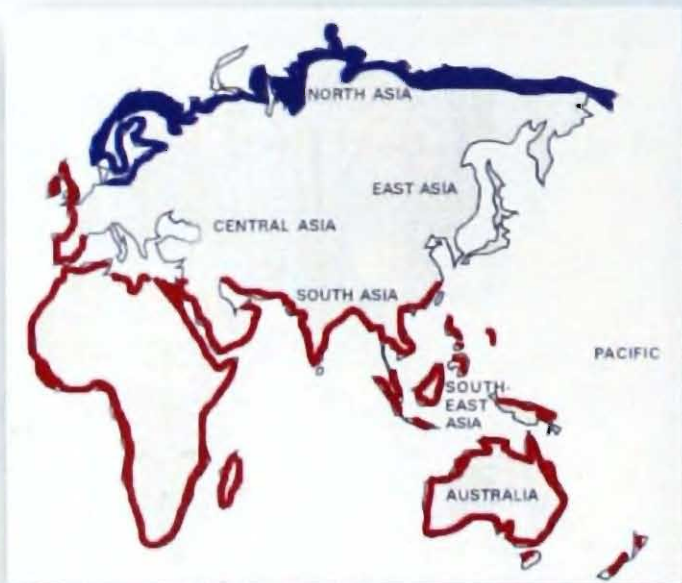
Voice : Shrill *tee-tee-tee* when flushed.

Habitat : Inland waters like tanks, streams, ditches, riverbanks, paddy fields and also seashore, tidal mudflats and estuaries.

Habits : Mostly solitary. Shows territorial rivalry with conspecifics, especially soon after arrival at the wintering grounds. Flies low over water with rapid fluttering of stiff wings. Runs about actively bobbing its rear end at the water's edge feeding. Food : consists of crustaceans, molluscs and insects, mostly picked up on surface.

Status : Winter visitor. Common. First among our migrants to arrive (late July and early August) and leaves late in May after most other birds have left.

Distribution : A very common winter visitor to all over India, Pakistan, Bangla Desh, Sri Lanka, Nepal, Bhutan and Maldives. Breeds within our range in Kashmir, Ladakh, Garhwal between 1800-3200m; all over Europe and Asia south of tundra. Also winters in Africa, SE Asia to Australia.



35. Ruddy Turnstone

Arenaria interpres (Linneus)
Kallurutikkata

Field characters : Size : (22 cm) Common Sandpiper. A stocky wader with unique black and white patterning on upperparts conspicuous in flight and short red legs.

Adult non-breeding : Head dark brown, upperparts greyish-black with white lower back, blackish rump; uppertail-coverts white with a brown cross band towards the rump. Tail tip white with a broad dark brown sub-terminal tail band; outer pair of rectrices white. Chin and throat buffish-white. Central breast black, extending as a semicircular band on either side of the breast, bordering a brownish-white patch each, to join the dark upperparts. Rest of the underparts white. In flight, black and white on upperparts, broad white wing bar and another white bar across the inner wing present a striking pattern. Underwing coverts and axillaries white. Bill black, legs orange red.

Adult breeding : **Male** Head and breast with black and white pattern, prevalent chestnut on scapulars. **Female** Head duller, with more streaks.

Juvenile : Upperparts browner, feathers have pale buff fringes. Head with pale patches. In flight, pattern on upperparts as in adult. Distinct up to December.

Voice : A metallic twitter when flushed.

Habitat : Rocky seacoasts, mudflats.

Habits : Flocks in company of other waders. Runs around actively, turning over stones and shells with bill to look for food. Swims well. Food : molluscs, crustaceans, insects, worms.

Status : Winter visitor. Not uncommon.

Distribution : Winter visitor to the coasts of India Pakistan, Bangla Desh, Sri Lanka, Nepal and Maldives. Rare vagrant to inlands. Breeds on Arctic coasts and Tundra around 76° N. Also winters on coasts of Europe, S and SE Asia.



36. Great Knot

Calidris tenuirostris (Horsfield)

Valiya knot

Field characters : Size : (29 cm) Common Sandpiper +, legs shorter. Largest of the *Calidrid* sandpipers, chunky in appearance.

Adult non-breeding : Upperparts light brownish-grey, boldly streaked black. Lower back, rump and upper tail-coverts dark brown with white scale marks. Head streaked with blackish-grey. Underparts white with foreneck and upper breast thinly streaked or spotted dark brown. Flanks also with some streaks. White under tail. **In flight, a narrow white wingbar, white rump and upper tail-coverts with a few black spots and pure dark grey tail evident. Underwing white, axillaries slightly tinged brownish. On ground, closed wings extend beyond tail-tip.** Bill long slightly curved at the tip, blackish-brown in colour, greenish at base. Legs greenish-grey.

Adult breeding : Darker and bolder marks on upperparts (formed by the dark centres of feathers), head and breast. Two chestnut bands along scapulars on either side. Indistinct supercilium. Underparts white, flanks and undertail with black heart-shaped marks.

Juvenile : As adult non-breeding, but darker and browner.

Voice : Subdued *nyut nyut* and a low *chucker-chucker-chucker*.

Habitat : Sandy or muddy estuaries and coasts.

Habits : Small groups with other waders. Feeds by probing.

Status : Winter visitor. Uncommon.

Distribution : Winter migrant to the coasts of India, Pakistan, Bangla Desh, Sri Lanka. Breeds possibly in NE Siberia. Also winters in parts of S and SE Asia and Australia.



37. Sanderling

Calidris alba (Pallas)
Thirakkata

Field characters : Size : (19 cm) Common Sandpiper -. Very active, whitish sandpiper usually found on seashore racing after receding waves.

Adult non-breeding : Pale, pearly-grey upperparts, coverts with white edges; has a black shoulder patch (lesser wing-coverts) when visible, a good field mark. Underparts white. In flight, shows very conspicuous white wingbar contrasting with blackish trailing and leading edges of wing. Sides of tail and rump white. Black bill and legs.

Adult breeding : Upperparts blackish with rufous and grey fringes of feathers. Head and breast spotted rufous and black with a precise partition against white underparts.

Juvenile : Like adult non-breeding but has some black spots on upperparts, streaking on head and hind-neck till Nov..

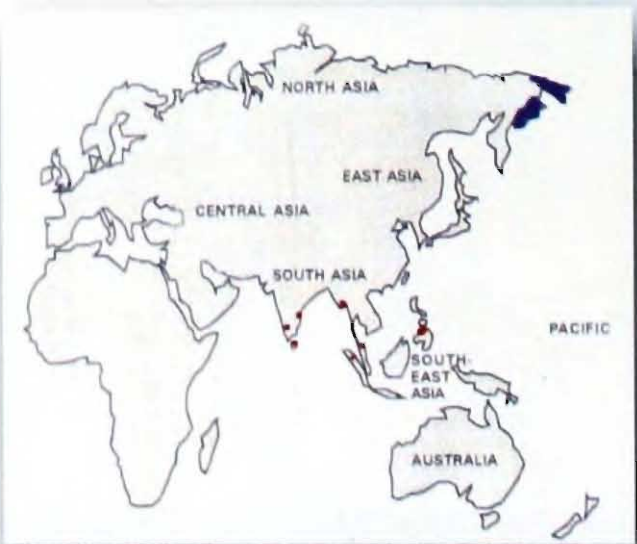
Voice : Liquid *plit* or *piyu*.

Habitat : Sandy seashore, tidal mudflats.

Habits : Small parties in company with other small waders. Extremely active; runs behind the receding waves picking food on the exposed surface, and runs back towards the shore ahead of the waves continuing this activity incessantly. Food : small crustaceans, molluscs and other small animals.

Status : Winter visitor. Common.

Distribution : Winter visitor to the seaboard of India, Pakistan, Bangla Desh, Sri Lanka, Nepal and Maldives. Breeds in Arctic tundra. Also winters in British Isles, Africa, S and SE Asia and Australia.



38. Spoon-billed Sandpiper

Calidris pygmeus (Linnaeus)

Karandikkokkan manaloothi

Field characters : Size : (17 cm) Sparrow. A small stint-like wader with unique spoon-shaped bill.

Adult non-breeding : Upperparts and crown streaky greyish-brown. White supercilium. Hindneck paler than crown and back. Wing-coverts grey with narrow white fringes. Sides of neck and upper breast lightly streaked grey-brown, rest of the underparts white. In flight, white wingbar, sides of rump and uppertail. **Bill black, broad at base, tapering towards the tip, which is flat, very broad, square and paddle-like. But the bill shape is not easily visible in field.** Legs black.

Adult breeding : Upperparts blackish with chestnut fringes. Reddish head and neck with dark brown streaks, supercilium chestnut-red and dark brown, dark eye-streak from lores. Face, neck and upper breast chestnut, streaked brown. Lower breast paler chestnut with streaks on sides, occasionally in the centre also. Rest of the underparts, axillaries and underwing white.

Juvenile : Like adult non-breeding but has orange-buff inner median coverts. Discernible in field till October.

Voice : A quiet *preep* or shrill *wheet*.

Habitat : Muddy coasts, coastal lagoons.

Habits : Small numbers among stints. Feeding method is distinctive – the bird wades in shallow water or squelchy mud, swings its bill from side to side instead of pecking or probing. **Food :** insects.

Status : Extremely rare winter visitor, only a single record for Kerala from Kadalundy estuary (Namassivayan & Uthaman, 1991). **Globally threatened.**

Distribution : A very rare winter visitor chiefly to the east coast of India, vagrant to west coast; Bangla Desh, Sri Lanka. Breeds in coasts of NE Siberia up to 166° E. Winter through the S and SE Asia.



39. Little Stint

Calidris minuta (Leisler)
Kuruvi manaloothi

Field characters : Size : (15 cm) Sparrow. The smallest of our waders.

Adult non-breeding : Greyish-brown upperparts, dark centre of feathers and dark shaft streaks appear as mottling. Greyish patches on sides of breast, sometimes joined as a breast band, rest of the underparts white. **In flight, white wingbar and white sides of dark brown rump and grey outer rectrices of dark brown tail visible. Bill black, thin and pointed, legs blackish brown. At rest, tail does not extend beyond closed wing tips.**

Adult breeding : Upperside blackish and brown with chestnut fringes of feathers. Crown with streaks of chestnut and brown, hindneck and sides of head also streaked paler chestnut and brown. Supercilium whitish, occasionally with chestnut tinge. Clear creamy white lines on sides of mantle show as a V mark. Chin and throat white, upperbreast rufous with brown streaks, rest of the underparts white.

Juvenile : Like adult breeding, but chestnut on upperparts paler, hindneck grey. Distinct up to December.

Voice : Soft musical *wit-wit-wit*, low *trr* in flight.

Habitat : Marshy estuaries, mudflats, paddy fields, edge of backwaters.

Habits : Gregarious. Flocks of hundreds at times, in association with other waders. Actively run about feeding. When disturbed, take off simultaneously. Food : small molluscs, crustaceans, insects, worms.

Status : Winter visitor in small numbers. Common.

Distribution : Winter migrant to the coasts of India, Pakistan, Bangla Desh, Sri Lanka, Nepal and Maldives. Breeds in N Europe to Central Siberia. Also winters in S. Europe, S Africa, Middle East and S Asia.



40. Temminck's Stint

Calidris temminckii (Leisler)
Temmincki manaloothi

Field characters : Size : (15cm) Sparrow. Looks as a pocket edition of Common Sandpiper.

Adult non-breeding : Upperparts almost uniform dark grey-brown. Breast duller grey brown or occasionally lateral patches on sides of breast. Underparts pearly white. **In flight, short and narrow white wingbar, broad white sides of grey-brown rump and white outer feathers (3) of grey-brown tail diagnostic.** At rest, tail projects well beyond closed wing-tips. Bill black. Legs olive-green or yellowish.

Adult breeding : Feathers of upperparts with blackish centres and rufous fringes. Head and hind-neck streaked brown and pale grey-brown. Indistinct supercilium. Breast and neck spotted and thinly streaked buff and grey-brown. Chin and throat paler, rest of the underparts white.

Juvenile : Almost similar to adult non-breeding.

Voice : A high-pitched trilling twitter *tiriritirir* in flight, distinguishable from the call of Little Stint.

Habitat : Tidal mudflats, coastal lagoons; also inland freshwater marshes and riverbanks.

Habits : Gregarious. Almost similar to Little Stint in all respects. 'Towers' straight up in the air when flushed.

Status : Winter visitor. Uncommon.

Distribution : Winter migrant to India, Pakistan, Bangla Desh, Sri Lanka, Nepal, Bhutan and Maldives. Breeds from N Europe to NW Asia up to 76° N. Also winters in Mediterranean region, NE Africa, Middle East, S and SE Asia.



41. Dunlin

Calidris alpina (Linnaeus)

Dunlin manaloothi

Field characters : Size : (19 cm) Common Sandpiper. Greyish calidrid with typical hunched up posture and decurved tip of bill.

Adult non-breeding : Upperparts and head dull grey-brown, wing-coverts fringed white. Narrow white supercilium, less distinct than in Curlew Sandpiper. Breast with grey-brown wash, thinly streaked darker mostly at the sides. Rest of the underparts white. **In flight, shows clear white wingbar, white sides of rump and uppertail-coverts, grey sides of tail.** Similar Curlew Sandpiper has pure white rump and uppertail. Bill black with a pronounced down curve at tip. Legs black.

Adult breeding : Upperparts brownish-black, feathers fringed with chestnut and grey. Wing coverts grey, fringed whitish. Head streaked chestnut and brown, whitish supercilium; hindneck grey streaked brown in **male** whereas contrasts less with mantle in **female**. Chin white, foreneck and breast whitish streaked brown. Rest of the underparts white, except for a **large black patch on belly.**

Juvenile : As adult non-breeding, but has brown inner median coverts fringed buff. Distinct till October.

Voice : Slurred *treeep* in flight.

Habitat : Seashore, tidal mudflats, estuaries, paddy fields, riverbanks.

Habits : Sociable, usually in association with other waders. Feeds generally at the water's edge, probing mud briskly and repeatedly in very fast movement of the bill, running in short spurts. Food : small crustaceans, molluscs, worms.

Status : Winter visitor. Uncommon. Present in small numbers mostly on the tidal mudflats of estuaries.

Distribution : Winter migrant to the coasts of India, Pakistan, Bangla Desh, Sri Lanka, Nepal and Maldives. Breeds in N Europe and N Asia up to 70° N. Also winters in Mediterranean region, NE Africa and SW Asia.



42. Curlew Sandpiper

Calidris ferruginea (Pontoppidan)

(*Calidris testacea*)

Katalkkata

Field characters : Size : (20 cm) Common Sandpiper. Similar to Dunlin but bill is evenly curved.

Adult non-breeding : Plain grey-brown upperparts, with darker shaft-streaks. Long clear white supercilium distinctive. Dark eye-streak from lores to dark ear coverts. Underparts white, sides of breast grey-brown washed and thinly streaked brown. In flight, strikingly white square rump patch contrasting with grey-brown tail. Black bill and legs.

Adult breeding : Upperparts dark brown with chestnut fringes. Supercilium, face and most of the underparts rich rufous. Undertail-coverts white. Underwing-coverts and axillaries white.

Juvenile : Like adult non-breeding, but with median-coverts rich buff fringed.

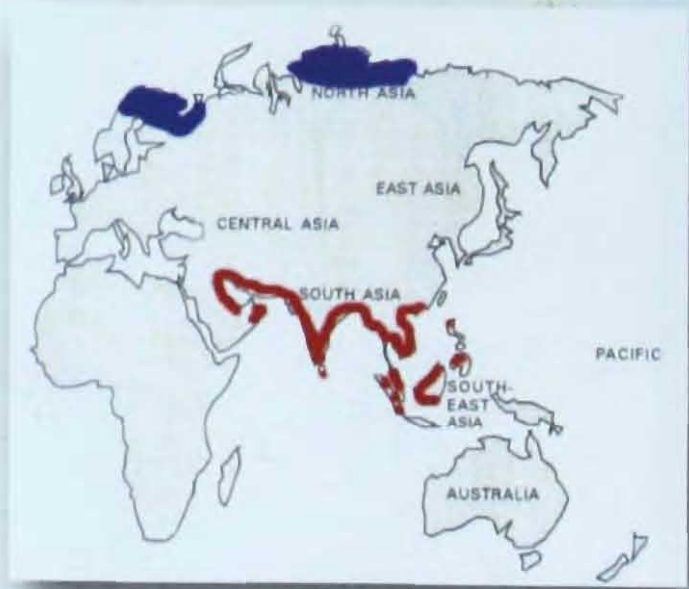
Voice : Soft *chirrup*, distinct from the call of Dunlin.

Habitat : Seashore, tidal mudflats at estuaries, squelchy paddy fields, marshes.

Habits : Gregarious, in association with other waders. Feeding habit similar to that of Dunlin. Wades in deeper water than other waders.

Status : Winter visitor. Uncommon. A small flock of 5-15 birds regularly seen to overwinter at Madayipara, Kannur district.

Distribution : Regular winter visitor to the seaboard of India, straggler to inlands; Pakistan, Bangla Desh, Sri Lanka, Nepal and Maldives. Breeds in N Asia up to N Siberia. Also winters in Africa, S and SE Asia and Australia.



43. Broad-billed Sandpiper

Limicola falcinellus (Pontoppidan)
Varayan manaloothi

Field characters : Size : (17 cm) Common Sandpiper -. A small sandpiper with distinctive double supercilium, looks like a miniature snipe.

Adult non-breeding : Upperparts grey-brown spotted and streaked darker with dark shaft streaks and dark centre of feathers. **Dark eye-streak and whitish double supercilia - the lower supercilium clearly visible; the upper visible only on closer observation.** Breast with grey wash, thinly streaked grey. Rest of the underparts white. In flight, distinct narrow white wingbar, white sides of blackish brown rump and uppertail-coverts visible. Central pair of rectrices dark brown, rest pale grey. Bill black, long and with a pronounced bend towards the tip as in Dunlin's; broad from base to tip, but this feature is not noticeable in field. Legs dark greyish-black, greenish or yellowish at times.

Adult breeding : Upperparts blackish-brown, fringed whitish and pale chestnut. Whitish lines at the sides of the mantle, formed by the whitish edges of mantle and scapulars. Crown blackish-brown, the brownish-white double supercilia distinct-lower supercilium broad and long, extending from base of bill to nape- and join in front of the eyes in a thin whitish line. Black eye-streak from lores become broad at ear-coverts; cheeks and throat brownish-white, thinly streaked brown. Neck and breast with grey-brown wash, heavily streaked brown, ending abruptly at lower breast contrasting with the white belly. Streaked sparingly on anterior flanks. (Some individuals seen in early September still in this plumage.)

Juvenile : Similar to adult non-breeding; upperparts spotted grey and brown, inner median coverts buff fringed. Distinct till October.

Voice : Twittering *chreet* in flight.

Habitat : Tidal mudflats, brackish lagoons, seashore.

Habits : Small parties in mixed flock of other waders. Feeding action slower than stints', more or less similar to Dunlin. Food : molluscs, worms, insects.

Status : Winter visitor. Uncommon. Small numbers (7-10) regularly present at Matakara; on 30/9/1987, 17 birds were seen.

Distribution : A winter visitor to the coasts of India, Pakistan, Bangla Desh, Sri Lanka. Breeds in N Europe and western Siberia. Also winters to the south of Mediterranean, Black, Caspian and Red Seas, Middle East.



44. Ruff

Philomachus pugnax (Linnaeus)

Bahuvarnan manaloothi

Field characters : Size : (25 cm) Yellow-wattled Lapwing. Relatively large, long-legged sandpiper-like wader with small head, small bill, humped back and bulging belly. Pronounced sexual dimorphism in breeding plumage.

Adult non-breeding : Upperparts grey-brown with large, dark centre of feathers. Grey-brown speckled breast, rest of the underparts whitish. Sides of neck white contrasting with darker hindneck, generally. In flight, narrow white wingbar on long wings, pure white oval patches (formed by the white sides of the long uppertail-coverts) on nearly the whole length of dark brown tail on either side. **Female** smaller. Bill dark brown, with orange or salmon base in some individuals. Legs variable in colour – olive with tinge of pink, yellow, orange, grey or green

Adult breeding : **Male (Ruff)** with erectile feathers on head and neck (ruff) variable in colour; reddish or orange bare parts. (These ornamental feathers are used in spectacular lek displays during breeding.). **Female (Reeve)** is smaller, lacks the tufts and ruff, has dark centre of feathers on upperparts and conspicuous black spotting on breast and flanks.

Juvenile : As adult non-breeding, scaly upperparts and buff tinged breast. Legs may be brownish-green or orange-green. Distinct till Nov..

Voice : Silent during winter. Low *chuck-chuck* or plaintive *tu-whit* when flushed.

Habitat : Tidal mudflats, marshes, wet paddy fields.

Habits : Gregarious, usually in company of other waders. Feeds actively, picking food from surface and by probing in mud also. Generally nocturnal. Food : molluscs, crustaceans, insects, worms and vegetable matter like grass seeds, berries and rice. Famous for the 'lek' display of the competing males during courtship.

Status : Winter visitor. Rare. Only a handful of records, mainly from central Kerala.

Distribution : Occasional winter visitor to the west coasts of India, Pakistan, Nepal, Bangla Desh, Sri Lanka and Maldives. Breeds across Palaearctic from N Europe, N. Africa to Tundra in east. Also winters in S Africa, S Asia and E China.



45. Black-winged Stilt

Himantopus himantopus (Linnaeus)

Pavizhakkali

Field characters : Size : (35-40cm). Red-wattled Lapwing, slimmer, legs longer. Unmistakable black and white wader with very long thin pink legs and long pointed straight black bill. In flight, legs trail well behind tail.

Adult breeding : **Male :** Wings and mantle black; lower back, rump and tail white; head and neck white; in some cases crown and hind neck dark grey. **Female :** Head and neck varies from white to grey as in male. Mantle and scapulars dark brown. Underwing black and under parts pure white in both sexes.

Adult non-breeding : In some birds, head and neck become extensively greyish.

Juvenile/Immature : Greyish crown and hind neck; upperparts brown with buffish fringes. Dull greyish pink legs, some have reddish base of bill. In juvenile, mantle appears scaly.

Voice : Noisy. Sharp *kik-kik* while foraging and also in flight, shrill *kikikikiki* when alarmed.

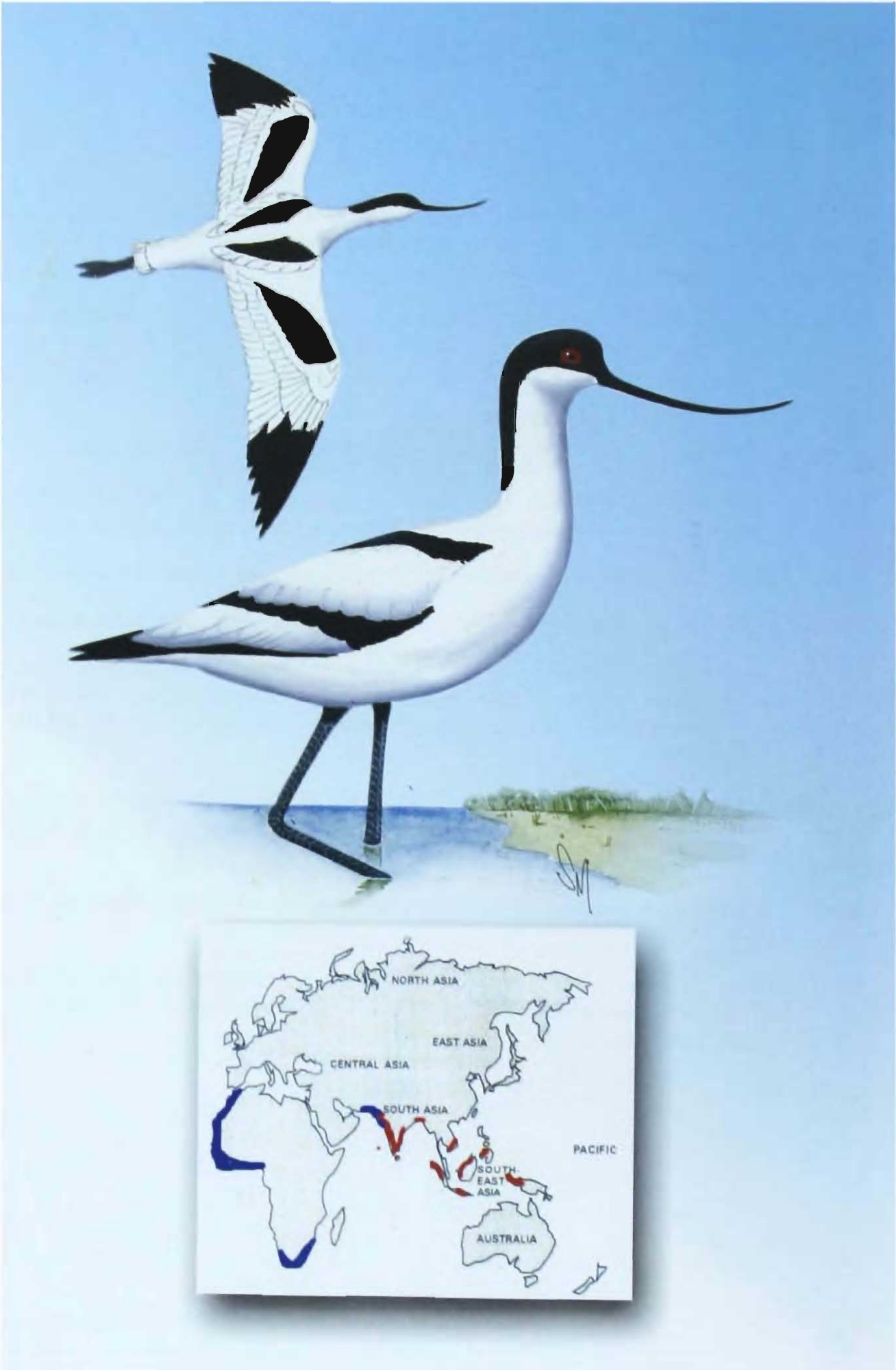
Habitat : Marshes, mudflats, estuaries. Sometimes frequents edges of polluted sewages.

Habits : Gregarious, walks leisurely and deliberately on mudflats or wades in shallow water, sometimes feeds by submerging head; feeds on aquatic insects, worms, molluscs and seeds of aquatic plants by picking from surface, probing or sweeping from side to side with bill. Fast and effortless flight.

Breeding : March to August mainly. Usually in small colonies at the edge of marshes or islets; nest scrape lined with grass or other vegetable matter. Clutch-size: 3-4, unusually 5. Both sex share parental duties.

Status : Winter visitor/resident, common. Stray breeding records from Kollam District in 1994 and 2003.

Distribution : Throughout India, normally up to 1500m; not in Andaman Islands; Pakistan, Bangla Desh, Nepal, Mediterranean region, S. Russia, S. Africa, Madagascar, S. Asia east to China and Middle East. Vagrant to the Maldives Islands.



46. Pied Avocet

Recurvirostra avosetta Linnaeus

Avocet

Field characters : Size : (45cm) Red-wattled Lapwing+, longer legs. Distinctive wader with contrasting black and white plumage and distinctive upcurved long slender bill. In flight legs trail behind tail, but not as much as in Black-winged Stilt.

Adult : Black cap extending below nape to hindneck, black wingtip (outer primaries) and a broad band through the wing-coverts, a black band on either side of the back; rest of the plumage snow white. Underwing also with black tip. Bill black, legs bluish grey. Sexes alike.

Juvenile : Black in plumage replaced with brown, white mantle and scapulars speckled with brown and buff.

Voice : Clear, melodious *klooit*, often in flight; alarm call harsher.

Habitat : Marshes, estuaries, tidal creeks, lagoons etc.

Habits : Pair or parties. Feed on slushy mud or shallow water skimming surface with bill swung from side to side or moved in circles to churn mud. Swims and upends often. Feeds on small aquatic creatures.

Status : Winter visitor, rare. Stray records from Matakara, Kadalundy, Kottapuzha estuary, Purathur and Wellington Island (Cochin).

Distribution : Winter visitor chiefly to NW India, Pakistan, Bangla Desh, Nepal, Bhutan, Sri Lanka, Maldives. Breeds within our limits in Gujarat coast, NW Pakistan. Breeds in Europe, S and E Africa, winters in S. Africa and S. Asia.



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47. Crab-Plover

Dromas ardeola Paykull

Njandunni

Field characters : Size : (41cm) Red-wattled Lapwing +. Black and white shorebird with heavy black bill and long bluish legs. In flight, neck is outstretched and legs trail behind tail.

Adult : Pure white plumage except for black mantle, inner scapulars, primaries, secondaries and greater coverts. White forewing, tail, rump and lower back contrast startlingly with the remaining black upperparts in flight. Small black patch around the brown eyes. Often has dark streaking behind crown and nape. Underparts and underwing, except for a blackish trailing edge, white. Thick, pointed jet-black bill.

Juvenile/Immature : Similar to the adult, but mantle and inner scapulars silver-grey, black on wing with brownish shade. Head greyer, heavily streaked on rear crown. This plumage is retained till next summer.

Voice : In winter, tern-like *kreek-kreek*.

Habitat : Seashore, mudflats at estuaries

Habits : Found singly, pairs or small parties. Usually crepuscular; main diet is crabs caught by chasing in typical plover style. Crustaceans and other small aquatic animals also taken, sometimes wading in shallow water.

Breeding : Not within Indian limits. Unlike other shorebirds, breeds in colonies in long tunnel dug up on sandbank; a single white egg is laid in the chamber at the end of the tunnel. Chick nidicolous.

Status : Winter visitor, rare. Recorded at Matakara, Kadalundy, Pudukkottai (Ernakulam District) and Perumathura (Thiruvananthapuram District). The earliest date seen at Matakara was 8th September.

Distribution : Breeds at the Gulf of Oman, the Gulf of Eden and the southern Red Sea. Winter migrant to the coasts of India, Pakistan, Sri Lanka, Maldives, Middle East, Madagascar and Aldabra Islands.



48. Stone-Curlew

(Eurasian Thick-knee)

Burhinus oedicephalus (Linnaeus)

Vayalkkannan

Field characters : Size : (41cm). Red-wattled Lapwing +. Large brown streaked bird with thick yellow legs, large yellow eyes and a conspicuous face pattern.

Adult : Brown head, white supercilium, lores and cheek, dark malar stripe from gape to hindneck, brown patches around the 'goggle' eyes form a striking facial pattern. Upperparts sandy brown with dark brown streaks, pure white lesser coverts appear as a wingbar on closed wings; in flight, brown wings with a broad grey panel bordered by two narrow white bars with an adjacent thin black bar each, prominent white patch on black outer primaries, smaller white patch at the base and another at the tip of the inner primaries. White chin and throat, neck and breast brownish with dark brown streaks, rest of underparts whitish with buff tinge at undertail. Black bill with yellow base.

Juvenile : Similar to adult, slightly paler overall, marked with buff, white on wings less prominent. Less distinct facial pattern.

Voice : High pitched *cur-lee*; quick-repeated *pick-pick-pick-pick*. Noisy at night, call carries several kilometres.

Habitat : Open scrub in the neighbourhood of cultivation, lateritic plains.

Habits : Pairs or small parties, crepuscular and nocturnal, sedentary. Spends day resting under a bush becoming active at dusk. When approached, freezes by squatting close to ground neck outstretched, almost invisible, its plumage serving as excellent camouflage. Feeds on insects and worms mainly, small lizards, rodents and occasionally seeds also taken.

Breeding : March to July, nest is an unlined scrape. Clutch-size : 2-3.

Status: Uncommon. Becoming excessively rare due to habitat loss.

Distribution : All over India from plains to 1000m in Himalayas, Pakistan, Bangla Desh, Nepal, Bhutan, Sri Lanka, Myanmar, Thailand and Cambodia.



49. Great Stone-Plover

Esacus recurvirostris (Cuvier)

(Great Thick-knee, *E. magnirostris recurvirostris*)

Perumkokkan plover

Field characters : Size : (51cm) Domestic hen. A large, thick-headed long-legged plover with heavy upturned yellow and black beak and big yellow eyes and peculiar black and white facial pattern.

Adult : Uniform greyish sandy brown above, white below. White ring around eyes extending behind as a supercilium with a black border above and a broader black band through the ear coverts below, another black streak from lower mandible to the sides of chin and white forecrown along with yellow base of bill form the facial pattern. Black lesser coverts appear as a bar on closed wings with a narrower whitish bar below. In flight, pale grey, black and white coverts, black secondaries, white inner primaries with a subterminal black band, and white patches on outer primaries present a striking pattern. Neck and breast greyish white with a tint of buff, occasionally streaked indistinctly; rest of the underparts white. Underwing white except for black tips of primaries and secondaries. Legs greenish grey, thick.

Voice : A loud harsh 'see-eeek' (Hayman *et al.* 1989).

Habitat : Stony beds of rivers, estuaries and saltpans.

Habits : Pairs or parties. Crepuscular and nocturnal. Spends most of the day resting on rocks or bunds out in the open. Runs very fast and swims well too. Bobs head up and down frequently. Feeds on crabs and molluscs, which it often finds by levering up large stones with its huge bill.

Breeding : No records from Kerala. Elsewhere in India, February to June, nest : a shallow scrape in sand, or even on bare rock. Clutch-size : 2.

Status : Rare. A single published record from Pudukkottai, Tamil Nadu (Nameer, 1992) and another unconfirmed record at Kadalundi, Kozhikode District (Uthaman & Namassivayan, 1990).

Distribution : All over India, mainly a low lying species, Pakistan, Bangla Desh, Nepal, Sri Lanka, Myanmar and parts of SE Asia.



50. Indian Courser

Cursorius coromandelicus (Gmelin)

Veli-alappan

Field characters : Size : (26 cm) Yellow-wattled Lapwing -. Sandy brown terrestrial bird with chestnut and black head pattern. Toes trail behind tail in flight.

Adult : Rufous crown, white supercilium from lores and a black eye-stripe below join at the nape. Sides of face whitish. Proximal half of wings and mantle sandy brown, primaries and greater coverts black, secondaries have narrow white trailing edge. Uppertail-coverts white; outer rectrices white, central pair greyish brown, rest with greyish base, white tip and black subterminal band. White chin, pale cinnamon throat becoming darker below to chestnut at upper belly. Underwing pattern similar to upperwing, conspicuous white trailing edge. A black patch at the centre of the grey brown belly. Rear belly and undertail-coverts white. Downcurved black bill, ivory white legs, iris brown.

Juvenile : Upperparts dull buff with brownish black bars and blotches. Dark brown crown with cream spots, small cream supercilium.

Voice : Low clucking call, usually silent.

Habitat : Dry stony plain with scrubs, ploughed fields and fallow land.

Habits : Pairs or scattered parties. Runs around swiftly in short spurts feeding on the ground. Wary and readily flies off though the colour of the bird provides excellent camouflage as the bird stands still. Food : beetles, larvae and other insects.

Breeding : May to July. Nest is an unlined shallow scrape; clutch 2 or 3.

Status : Resident. Uncommon. Not recorded yet from north Kerala.

Distribution : Throughout the drier areas of India except Manipur and Assam; Pakistan, Bangla Desh, Nepal and Sri Lanka.



51. Oriental Pratincole

Glareola maldivarum (J.R. Forster)

Valiya meevalkkata

Field characters : Size : (29 cm) Myna, but slimmer. Brown bird having long pointed wings and deeply forked tail, hawking insects with tern-like flight, sometimes running on the ground on short legs.

Adult breeding : Upperparts olive-brown. A black line starting from the lores and continuing behind the eyes borders creamy throat patch. Upper breast and flanks brownish. Lower breast orange-buff, abdomen and undertail-coverts white. Narrow buff white eye-ring. In flight, white lower rump, uppertail-coverts and outer webs of outer rectrices contrast conspicuously with rest of the black tail and dark upperparts. Flight feathers all black, lacking the narrow white trailing edge on the secondary in Collared Pratincole *Glareola pratincola* (Linnaeus). Underwing black with chestnut underwing-coverts. Tail fork shallower than that of *G. pratincola*, tail distinctly shorter than closed wing. Black, slightly downcurved bill with a small patch of bright red at the gape. Legs black, eyes dark brown.

Adult non-breeding : Paler lores, the black gorget gives way to a series of narrow black streaks, breast becomes mottled greyish brown (This plumage is retained for a very short period only). The red at gape paler.

Juvenile : Greyer overall, head and neck dark streaked, feathers of upperparts fringed with buff-white and have a subterminal black bar. Gorget indistinct, breast paler with brown streaks and spots.

Voice : Constantly uttered *kirri-kirri* in flight.

Habitat : Marshes, tidal mudflats, paddy fields, fallow land and grazing grounds.

Habits : Gregarious. Active mostly in mornings and evenings, flying gracefully, fast, to capture insects like a swallow does. Hunts on ground also, running in short spurts; during day, rest squatting or standing on ground. Food : insects.

Breeding : March to May. Nests in colonies on islets with short vegetation or ploughed fields. Nest is an unlined small depression, sometimes a hoof-mark. Clutch-size : 2-3

Status : Uncommon. Breeding visitor? The only known breeding colony at Kattampally, Kannur district (Sashikumar, 1997).

Distribution : All over India, Pakistan, Bangla Desh, Sri Lanka and Maldives. Breeds throughout Asia. Certain population winter through NE Asia to Australia.



52. Small Pratincole
Glareola lactea Temminck
(Small Indian Pratincole)
Cheriyā meevalkkata

Field characters : Size : (17 cm) Sparrow +. A sandy grey bird with swallow-like flight on pointed wings; very shallow forked tail, short legs.

Adult breeding: Sandy grey upperparts, crown dark brown, lores black. Throat and breast sandy buff and belly white. In flight, upper wing pattern striking – black outer wing, trailing edge and central tail feathers contrasting with white wing panel, rump, uppertail-coverts and outer rectrices. Underwing wholly black except for a brilliant white wing-panel. Bill black with red at base, yellow gape, legs black.

Adult non-breeding : Lores paler, indistinct streaking on throat (this plumage stage present for a short period only).

Juvenile : Like non-breeding, crown buff-spotted and paler throat; buff fringes of primaries and upperparts visible at close range, brown spots on throat and upper breast.

Voice : Sharp *tirit-tirit*, also *tuk-tuk-tuk*.

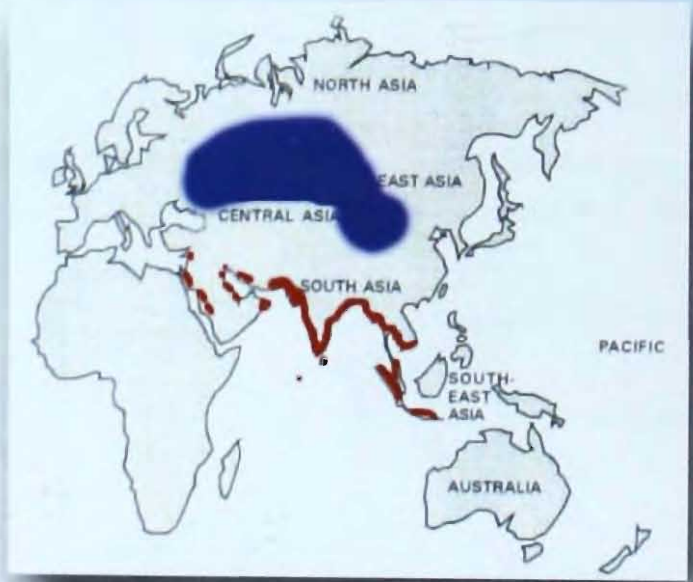
Habitat : Rivers with sand banks, coastal marshes.

Habits : Gregarious. Flocks fly over river, hawking insects. Alights on ground; rest and occasionally feed on sandbanks running fast on short legs. Mostly crepuscular, feeding till it is quite dark. Food : insects.

Breeding : March to May. Colonial; nest on bare ground on the sand banks. Clutch-size: 2 usually, rarely 3. Recorded at the islets in the reservoirs of several irrigation/hydel dams and the sand banks of Bharathapuzha.

Status : Resident, locally common.

Distribution : The wetlands of India up to 1800m in Himalayas; Pakistan, Bangla Desh, Sri Lanka, Nepal, Bhutan, east to Myanmar and Thailand.



53. Pallas's Gull

Larus ichthyaetus Pallas

(Great Black-headed Gull)

Valiya kataalkakka

Field characters : Size : (66-72 cm) Domestic duck +. Largest of our gulls.

Adult non-breeding : Upperparts darkish grey. Head mainly white, dark eye-patch spreads lightly to crown, nape and hindneck speckled brown, heavily towards lower neck. Underparts white. In flight, wings grey, paler than mantle, clear white leading edge from carpal area towards wingtips; outer 6 primaries have black sub-terminal crescent markings visible at close range; rump and tail white. Underwing white, the markings on outer primaries here too. Iris dark brown, orbital ring red. Bill orange-yellow with red tip and a broad black band in between. Legs greenish-yellow.

Adult breeding : Black hood on head, white crescent marking above and below eye. Rest as non-breeding adult. (Some individuals seen in this plumage in winter also.)

First winter : Upperparts grey with brown fringes of some feathers. Head as adult non-breeding. Underparts white, sides of breast speckled brown. In flight, primaries, secondaries and upperwing-coverts at the carpal area brownish-black. Conspicuous white midwing panel along coverts. Whitish rump, white tail with broad black (or faded to brown) sub-terminal band. Bill blackish with grey base and a broad black sub-terminal band. Legs grey, brown or flesh.

Second winter : Upperparts mainly grey. Head as adult non-breeding. Underparts white. In flight, grey upperwing, outer webs and tips of outer primaries and greater primary coverts blackish decreasing in area towards inner primaries. Brown spots on outer medians and median coverts. Secondaries may have a sub-terminal band at times. Rump and tail white with a black sub-terminal tail band.

Third winter : Like adult non-breeding, wingtips blacker, tail band paler.

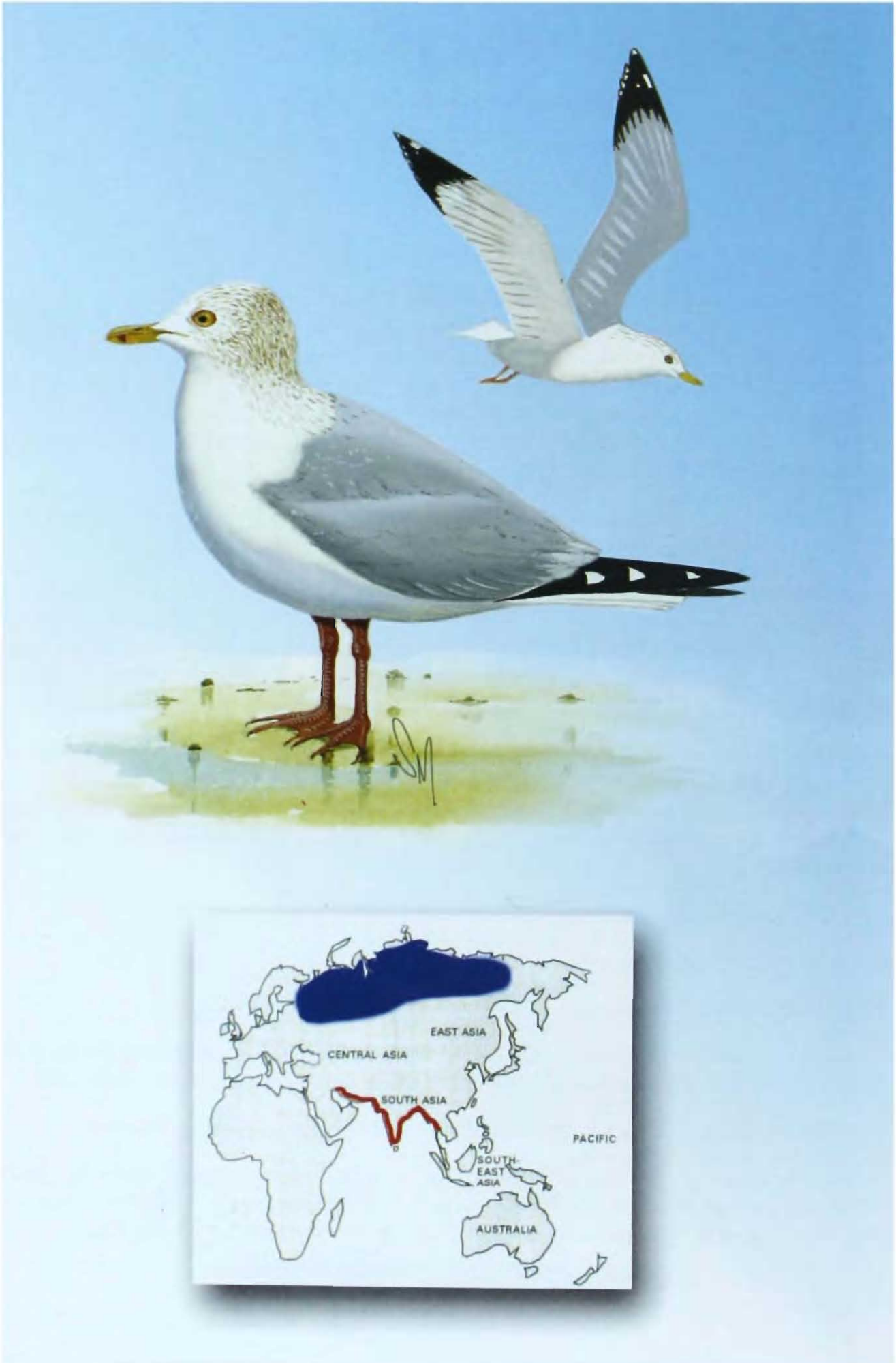
Voice : Loud, rasping *kraa-a*.

Habitat : Seacoast, sometimes inland in large rivers, lakes, backwaters.

Habits : Solitary or in small parties. Ranges far into sea sometimes following fishing boats. Rests on mudflats or sandbanks in company of other gulls and terns. Food : fish, offal.

Status : Winter visitor. Locally common. Large congregation seen at Purathur.

Distribution : Winter visitor to the coasts of India, Pakistan, Bangla Desh, Sri Lanka, Nepal, Bhutan and Maldives. Occasional vagrants to the inland waters. Breeds in S Russia to NW Mongolia. Also winters in SE Mediterranean, Red Sea, coasts of Middle East.



54. Heuglin's Gull

Larus heuglini (Bree)
Heuglin kataalkakka

Field characters : Size : (60 cm) Domestic duck. Large gull, mainly grey and white in winter.

Adult non-breeding : Upperparts and upperwing grey, darker than in Yellow-legged Gull. *Larus cachinnans*, which also may be present in our coast. Underparts white, sides of breast streaked brown. Head white, streaked grey-brown; nape heavily streaked. In flight, white trailing edge of wings; outer primaries black— decreasing in area towards inner— tipped white; mirrors on two outermost. White rump and tail. Legs generally pinkish, occasionally yellowish. Bill yellow, gonys spot red. Iris yellow, orbital ring red.

Adult breeding : Head, sides of breast white. Rest as non-breeding.

First winter : Upperparts including scapulars and coverts grey-brown with pale fringes of feathers giving a scaly appearance. Head whitish with brown streaking, dark ear-coverts, face paler. Underparts heavily mottled grey-brown in whitish. In flight, outer primaries and secondaries dark brown, inner primaries paler showing a pale window; rump and upper tail-coverts paler than rest of the upperparts, tail whitish barred brown, blackish-brown sub-terminal band. Head and underparts whiter than juvenile, overall plumage darker than similar Yellow-legged Gull.

Second winter : Upperparts greyer with fewer markings, head whiter with some brown streaking, Underparts and underwing whiter. Pale window on inner primaries more obvious. Rump and tail mostly white, a broad sub-terminal tail band, but narrower than in first winter.

Third winter : Similar to adult non-breeding, but shows some brown mottling on wing coverts, black on wingtips vague and does not have mirrors. Faint tail-band.

Voice : A strident *kyow* or *keeow*, not distinguishable from the call of other large gulls.

Habitat : Seacoast, river, backwaters.

Habits : Gregarious, mixes freely with other gulls. A scavenger at seaports, fishing villages, feeding on fish, offal and refuse. Strong flier but also adept of sitting on water and swimming. Roosts on safe sand bars, seashore or offshore rocks.

Status : Winter visitor. Uncommon. Small numbers among other gulls.

Distribution : A winter visitor to the coasts of India, rare vagrant to inland; Pakistan, Bangla Desh, Sri Lanka, Nepal and Maldives. Breeds in N Siberia. Also winters in the southern part of the Red Sea, N African coasts and Middle East.



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55. Brown-headed Gull

Larus brunnicephalus Jerdon

Thavittu-thalayan kataalkakka

Field characters : Size : (46 cm) Jungle Crow. Medium sized gull.

Adult non-breeding : Upperparts grey. Head white with a black vertical crescent at ear-coverts. Underparts white. In flight, mainly grey upperwing, secondaries paler; **outer two primaries black with prominent white mirrors**, other primaries with black tip and narrow black emargination at inner webs, which decreases in area towards the inner primaries and white base changing gradually to grey inwards. Underwing grey except for the outer primaries, which are as on upperwing. Rump and tail white. Iris brown with red or yellow tinge, orbital ring red. Bill bright red with black tip. Legs bright deep blood red.

Adult breeding : As non-breeding, but develops a brown hood. This plumage attained before leaving the wintering area in April and retained till October as they arrive. Bill blood red.

First winter : Upperparts grey-brown with pale brown fringes of feathers. Head mostly white, crown nape and ear-coverts shaded brownish-grey. Underparts white. In flight, wings greyish with brownish carpal bar and another bar of the same colour across median coverts; primaries and secondaries tipped black forming a black trailing edge. White rump and tail, broad blackish sub-terminal tail band. Flight feathers retained from juvenile plumage and usually fade by this time.

Voice : Loud rasping *kreeak*.

Habitat : Seacoast, backwaters, estuaries, rivers, lakes.

Habits : Gregarious. Scavenger, frequenting fishing villages, seaports etc. in association with other gulls. Accompanies fishing boats to and from sea to feed on discarded catch. Floats and swims well. Confiding. Food: fish, offal and insects and worms occasionally.

Status : Winter visitor. Common. The most numerous of our gulls.

Distribution : Winter visitor to the coasts of India, Pakistan, Nepal Bhutan, Bangla Desh, Sri Lanka and Maldives. Breeds in Ladakh between 3000 and 4500m and in high plateaus of C. Asia up to Mongolia. Also winters on coasts of Middle East, S and SE Asia.



56. Black-headed Gull

Larus ridibundus Linnaeus
Cheriya katakkakka

Field characters : Size : (43 cm) House Crow. The smallest of our gulls.

Adult non-breeding : Upperparts grey. Head white with a black crescent at ear-coverts. In flight, upperwing pale grey with **conspicuous white wedge-shaped leading edge to outer wing and black wingtip** formed by black tips of outer 6 to 8 primaries. **Lack of wing mirror and smaller size separates it from similar Brown-headed Gull.** Underwing-coverts pale grey, outer primaries black with white inner webs, secondaries whitish. Rump and tail white. Dark brown iris, orbital ring red. Bill deep red with black tip. Legs bright red.

Adult breeding : Develops a brown hood over head. Bare parts become brighter.

First winter : Upperparts grey. Head whitish with a blackish spot at the ear-coverts. In flight, grey upperwing-coverts, brown carpal bar and a black subterminal trailing edge and black wingtip with outer webs of 3 to 4 outer primaries fully black reducing the extent of the **white leading edge of outer wing, still a diagnostic feature that separates it from first winter Brown-headed Gull;** rump white; tail with a dark subterminal band; underwing as in adult with less white on wing quills. Bill orange flesh with black tip. Legs also orange flesh.

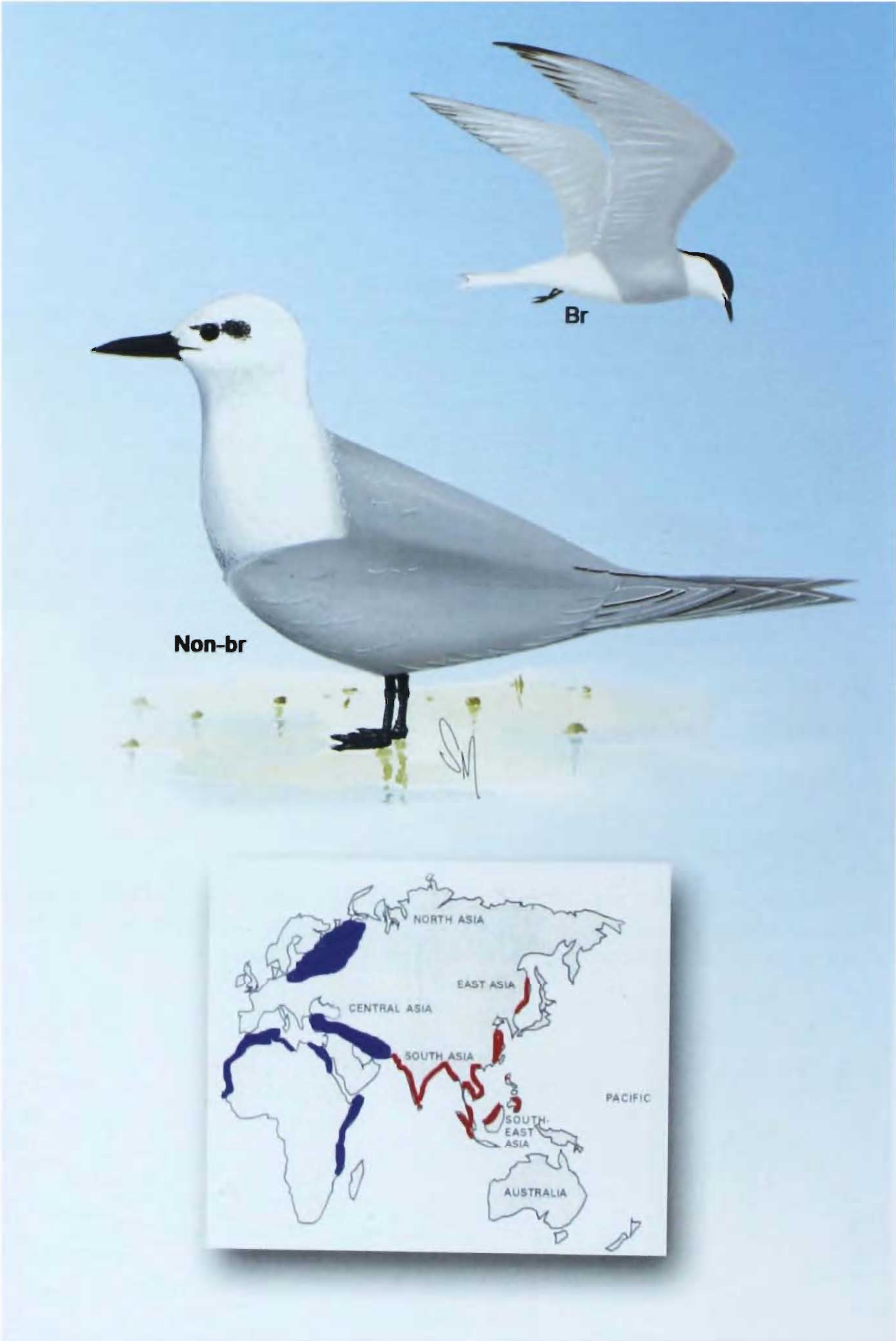
Voice : A querulous *kree-ah* and a wailing *ka-yek*.

Habitat : Seacoast, estuaries, harbours, lakes and rivers.

Habits : Gregarious. Seen in company of Brown-headed Gull mostly, whose habits it shares too.

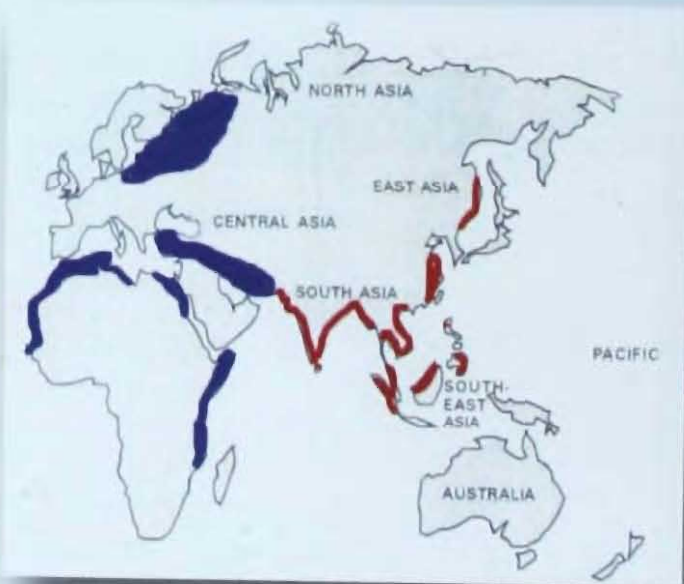
Status : Winter visitor. Common.

Distribution : Winter migrant to the coasts of India, Pakistan, Bangla Desh, Sri Lanka, Nepal and Maldives. Breeds across Europe, W and C Asia up to S Mongolia. Also winters on coasts of N Africa, Mediterranean, Middle East and S and SE Asia.



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57. Gull-billed Tern

Gelochelidon nilotica (Gmelin)
Pathakkokkan aala

Field characters : Size : (38 cm) Black-headed Gull -. Large white tern with gull-like large bill.

Adult non-breeding : Upperparts pearly-grey. Head white, a black patch around eyes and a black spot above the ear-coverts. Outer 6-8 primaries with dark inner webs and tipped blakish forming a dark trailing edge on outer wing. Underparts white. Shallow tail fork, but deeper than that of Whiskered Tern. Black stout bill; longer black legs. Thickset body and broad wings unlike other terns. (For differentiation from Sandwich Tern, see that species.)

Adult breeding : As non-breeding but has a black cap.

Juvenile : Like non-breeding, crown streaked and upperparts barred with dark brown. Tail tipped brown.

Voice : Generally silent, a low *cheer-wek*.

Habitat : Coastal mudflats, estuaries, backwaters, rivers and inland lakes.

Habits : Single or small flocks in association with other terns. Flies over the mudflats or water close to the surface picking up food. Occasionally feeds over cultivation. Rests on mudflats in company of other terns and gulls during high tide. Food : crabs, frogs, insects, small fish.

Status : Winter visitor. Common, not very numerous.

Distribution : A common winter migrant to all over India, Pakistan, Bangla Desh, Sri Lanka, Nepal and Maldives. Breeds in NW India, Kashmir, Europe, W Asia, NW Africa to Middle East. Also winters in NE Africa, Middle East and S Asia.



58. Caspian Tern

Sterna caspia (Pallas)

Hydroprogne caspia (Pallas)

Valiya chenkakkan aala

Field characters : Size : (51 cm) Brown-headed Gull +. A large tern, with large red bill and gull-like flight.

Adult non-breeding : Upperparts pale grey. Head streaked white in black. Upperwing uniform grey, inner webs of outer primaries darker. **Blackish underside of outer primaries contrasting sharply with white underwing diagnostic.** Neck, underparts and rump white. Tail pale grey, shallow fork. **Bill red, legs black.**

Adult breeding : Like non-breeding, with black cap, suggestion of a crest at nape.

Juvenile : Upperparts pale grey with brown tips of feathers forming a scaly pattern. Upperwing with a dark carpal bar. Greyish rump and brown tipped tail. Head with brown and white speckled cap. **Bill orangish with black tip, legs blackish.**

Voice : Loud, raucous *kraa-ab*.

Habitat : Seacoast, estuaries, backwaters.

Habits : Single or 2 or 3 individuals in association with other terns. Leisurely flight. Feeds by plunging in water. Food : fish, prawns, crabs.

Status : Winter visitor. Uncommon.

Distribution : Winter migrant to the seaboard of India Pakistan, Bangla Desh, Sri Lanka, Nepal and Maldives. Breeds within Indian limits in Gujarat, Europe, N Africa and W Asia. Also winters in S Africa and S Asia.



59. River Tern

Sterna aurantia J.E.Gray

Puzha aala

Field characters : Size : (38–46 cm) Black-headed Gull. A graceful pale grey tern with deeply forked tail and yellow bill, frequenting fresh water habitat.

Adult breeding : Upperparts grey. Head white with black cap. Underparts greyish white, undertail-coverts white. Whitish upper primaries and coverts, in fresh plumage, contrast with grey inner wing. Rump pale grey. Tail grey, outermost rectrices white, deeply forked. Bill heavy, yellow. Legs red to orange. Lack of crest and habitat separates it from crested terns.

Adult non-breeding : As breeding, forehead and crown speckled black and white. Bill duller yellow, tipped black.

Juvenile : Upperparts brownish grey with brownish-black fringes of feathers. Head with an indistinct cap of brown with white streaks. White chin and throat, underparts white with grey-brown smudges at sides of breast. Tail grey with brownish subterminal band. Bill dusky-yellow with dark tip.

Immature (First winter) : As adult non-breeding, but with some mottling on upperparts. Head as non-breeding, occasionally with dark eye-patch spot on ear-coverts. Yellow bill with black tip.

Voice : Variety of calls, all loud and shrill. *kirivi-kirivi-kirivi*; *kwey-ye kwey-ye*; *kwey-kik*; *kirikik-kirikik*.

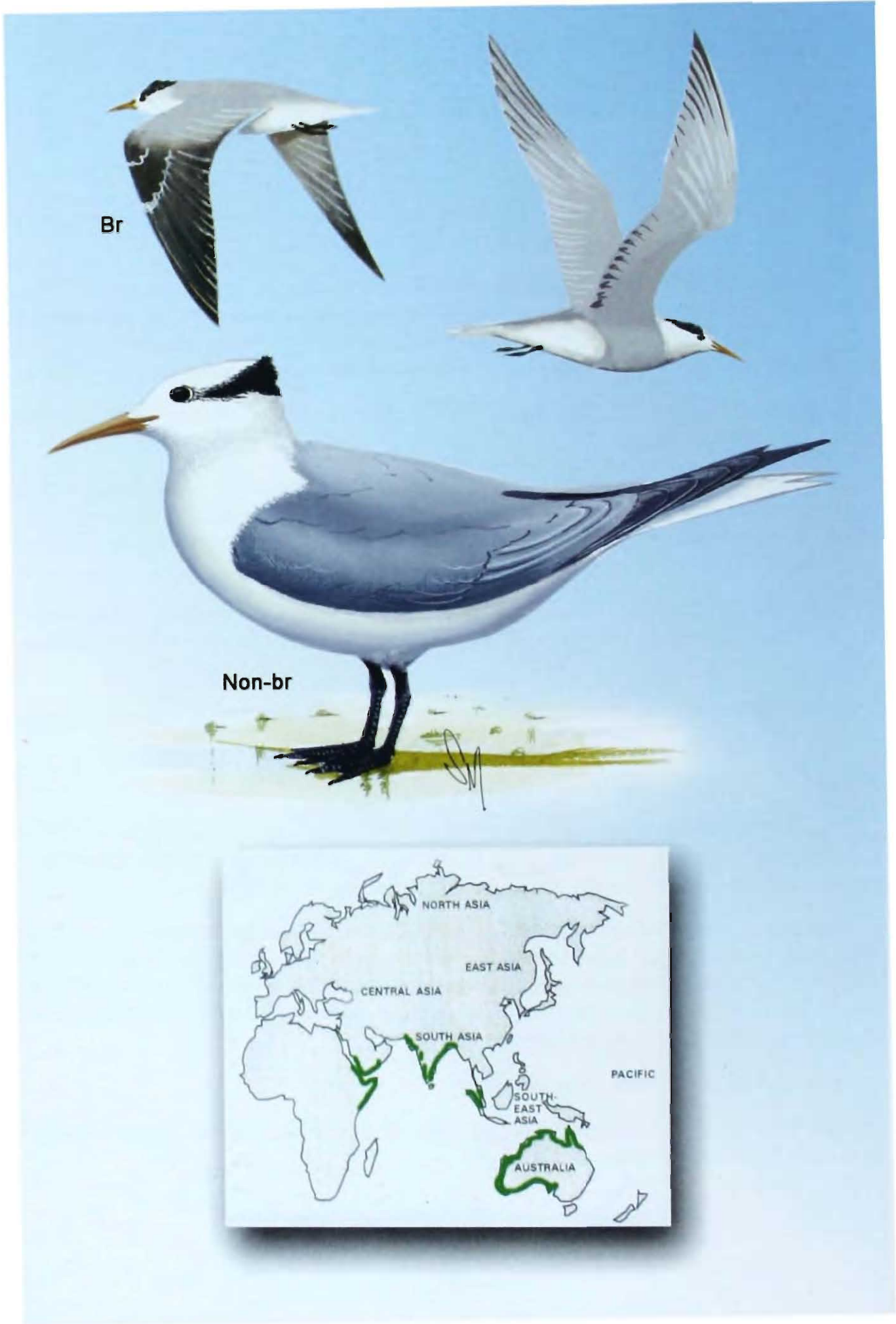
Habitat : Estuaries, large rivers, reservoirs and tanks.

Habits : Gregarious. Small parties in association with other terns fly over water at 6-10 m high, frequently plunging into water to catch fish, eating on the wings turning it round so as to swallow head first. Flocks rest and roost on sandbanks, facing wind.

Breeding : Season : March to May. Colonial. Shallow scrape on islets in reservoirs and large rivers, with pratincoles and other terns. Clutch: normally 3, rarely 4, egg colouration variable – from buffy stone to greenish grey, spotted, blotched and streaked with brown and inky purple; size 42.0 X 31.4 mm. Both sexes share incubation and parental duties. Incubation period 18 to 19 days. For details see Neelakantan *et al.* (1993)

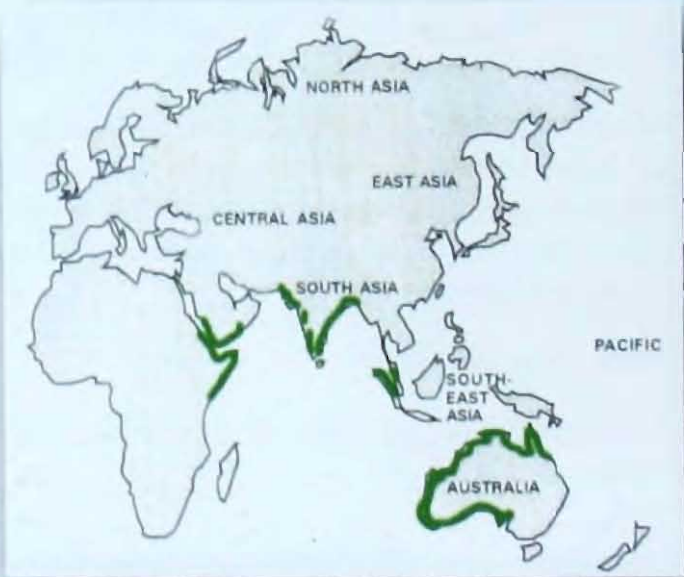
Status : Resident. Locally common.

Distribution : A resident species in the plains all over India, Pakistan, Bangla Desh, Sri Lanka and Maldives, SE Asia.



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60. Lesser Crested Tern

Sterna bengalensis Lesson

Cheriyā katalaala

Field characters : Size : (43 cm) Black-headed Gull. A smaller version of Large Crested Tern with which it associates often, but distinguishable. Usually flies with neck outstretched.

Adult breeding : Upperparts pale grey. **Head :** black cap from base of bill through a line below the eye to nape, black nuchal crest, sides of head, chin and throat white. Upperwing pale grey, primaries darker; underwing and underparts white. Tail grey, moderately forked. **Bill orange-yellow, slender than that of Large Crested.** Legs black. Differentiated from Large Crested by smaller size, black forehead and colour of bill.

Adult non-breeding : Similar to breeding, forehead white, crown streaked white, black reduced to a line around nape. Upperwing uniform pale grey. Bill paler.

Juvenile : Upperparts grey with dark centres of feathers; secondaries, greater and lesser coverts with brownish centres, outer primaries brown – the upperwing pattern shows less contrasting bars than juvenile Large Crested. This plumage soon fades and after a few months resembles adult non-breeding. Tail pale grey with brown tips. Underparts white. Bill greyish-yellow.

First winter : As adult non-breeding, but primaries and coverts dark grey. Differentiated from first winter Large Crested by lack of dark bar on greater wing coverts.

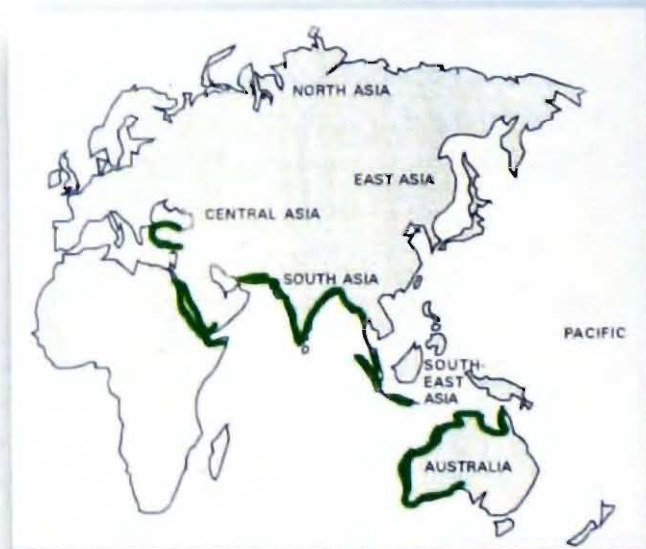
Voice : High pitched *kreek-kreek*.

Habitat : Pelagic, but seen at estuaries and coast also.

Habits : Not different from those of Large Crested.

Status : Winter visitor. Common. Present in fairly good numbers throughout the year in north Kerala coast, but no breeding recorded within the region.

Distribution : Resident to the coasts of India, Pakistan, Bangla Desh, Sri Lanka, Nepal and Maldives. Breeds on Lakshadweep Islands, Rameswaram; W Pakistan and Maldives Islands. Breeding range extends from the Mediterranean and E Africa to Australia.



61. Large Crested Tern

Sterna bergii Lichtenstein

Valiya katalaala

Field characters : Size : (53 cm) Brown-headed Gull +. **The largest of our terns.** In flight, head drawn back into shoulders giving the appearance of deeper breast.

Adult breeding : Upperparts grey. **Head : white forehead, black cap and nuchal crest, rest white.** Upperwing pale grey, primaries silvery white with greyish inner webs, secondaries tipped white forming a white trailing edge on inner wing. Underparts white. Tail pale grey, moderately forked. **Bill greenish-yellow, large.** Legs black.

Adult non-breeding : Like breeding, black cap reduced to hind crown and nape usually diffused with white streaks, forehead and crown white, smudged black. Fresh darker wing-coverts form a dark band at the centre of the inner wing. Bill duller.

Juvenile : Upperparts grey with brownish tips of some feathers. Head: as non-breeding, cap duller, sides of head with dark streaks. Wing with blackish-brown primaries and coverts, secondaries dark brown with white tips, greater and median coverts pale greyish-brown with white fringes – on the whole, inner half of wing shows three distinct dark bands. Underparts white. Rump pale grey, tail darker, occasionally with dark tip of outer rectrices. Bill darker, with blackish tip.

First winter : As juvenile, but upperparts more uniform grey.

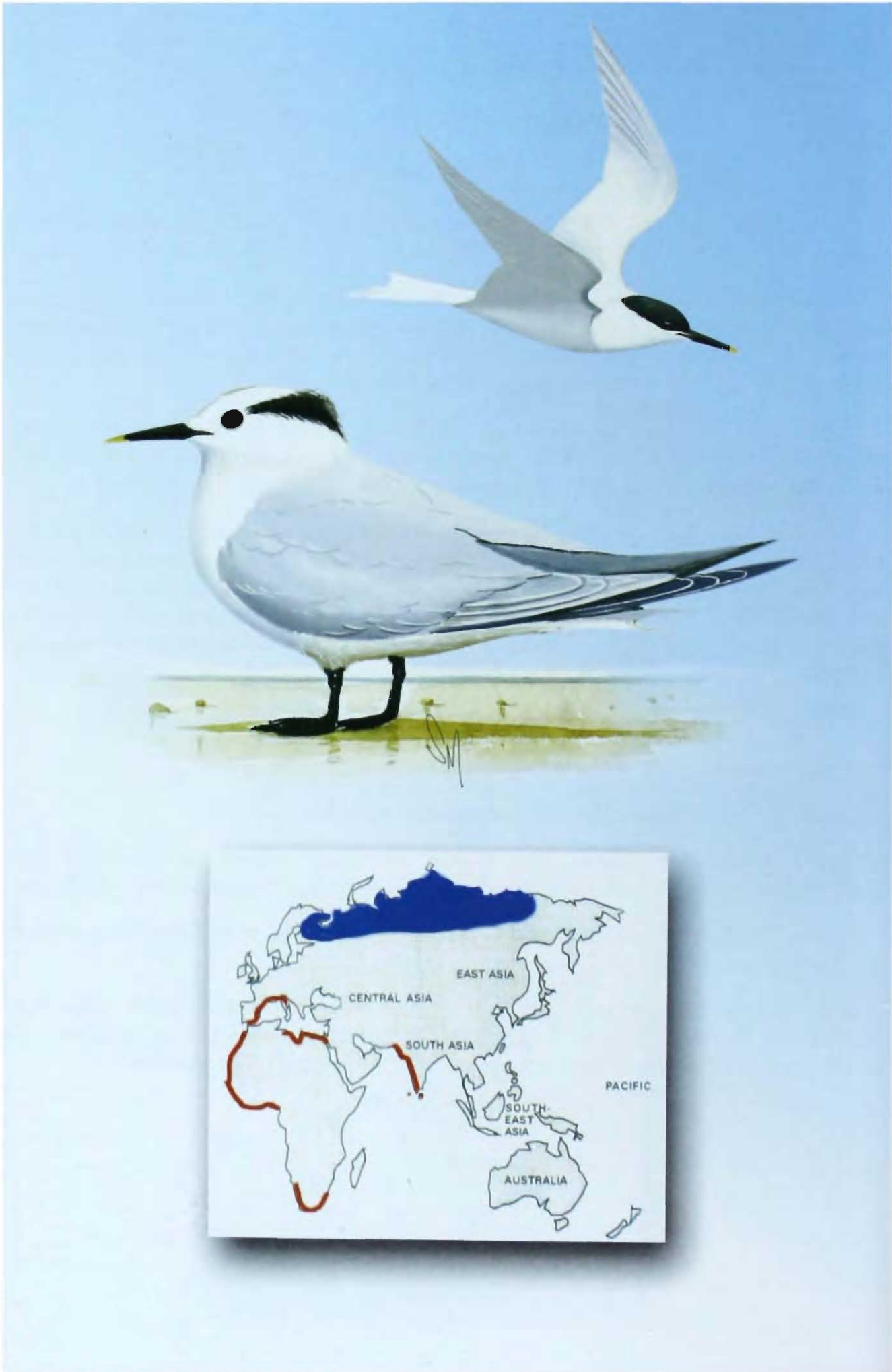
Voice : Harsh *chirruk*, also a high pitched *kree kree*.

Habitat : Mainly pelagic, but seen at estuaries and seacoast.

Habits : Gregarious. Parties in association with Lesser Crested hunt by hovering and plunging. Rests on sand banks and estuarine mudflats. Food : fish and prawns, chiefly.

Status : Resident?. Common. Could be seen at the estuaries of north Kerala the year round; no breeding records.

Distribution : Resident to the seaboards of India, Pakistan, Bangla Desh, Sri Lanka, Nepal and Maldives. Breeds in India on Vengurula Rocks off Ratnagiri coast and in Sunderbans. Also breeds on the islands to the Red Sea and off the NE African coasts to Australia.



62. Sandwich Tern

Sterna sandvicensis Latham

Kadalundy aala

Field characters : Size : (44 cm) Black-headed Gull. Looks very white.

Adult non-breeding : Upperparts pale grey. **Head :** forehead white, black crown and nape streaked white. Small nuchal crest. Rump and tail white. **Wings long, narrow,** silvery-grey above and white below except for dark grey inner webs of outer primaries. Underparts white. **Tail moderately forked. Long slender bill black, tipped yellow.** Legs black. Shape of wings and tail, pattern of head and shape and colour of bill separates it from similar non-breeding Gull-billed tern.

Adult breeding : similar, black cap from bill to nape, nuchal crest more prominent.

Juvenile : Grey upperparts, some arrowhead-shaped black markings on upperwing-coverts and tips of primaries. Head: as non-breeding, but browner with white streaked crown. Rump white, tail greyish-white with black tips. Underparts white. Bill and legs black.

Voice : Loud harsh high-pitched *kirrik* or *kirriw-kirriw*.

Habitat : Maritime, also at estuaries, lagoons and coasts.

Habits : Similar to other sea terns. Hunts by hovering high above water before plunging. Active mainly during mornings and evenings, resting on rocks or sandbanks through forenoons and afternoons. Food : mainly fish.

Status : Winter visitor. Common at the estuaries north of Purathur (Deepakumar, 1991).

Distribution : Winter migrant mainly to the West coasts of India, Pakistan, Sri Lanka and Maldives. Breeds on the coasts of Europe. Also winters on the coasts N and W Africa to Cape of Good Hope; Red Sea, Middle East.



63. Black-naped Tern

Sterna sumatrana Raffles

Karimchutti aala*

Field characters : Size : (35 cm) Black-headed Gull -. A sea tern, looking very white against the dark grey sea. No seasonal difference in plumage.

Adult : Upperparts pearly-grey. **Head :** white, a narrow black band from beak ending below eye, another from eyes, broadening towards nape. Upperwing pearly-grey, outer web of outermost primary black showing as a black edge on closed as well as open wing; underwing white. Underparts white, with a flush of pink in breeding season. **Tail white, deeply forked.** Bill and legs black.

Juvenile : Upperparts with brownish tips of feathers giving a mottled appearance. Head: the band from lores to nape incomplete, crown and forehead speckled black. Wing with a blackish bar on forewing.

Voice : Sharp *keeyic* or *kick*.

Habitat : Exclusively maritime. Seacoast, islets.

Habits : Flocks feed over sea, preferring inshore waters, generally picking prey from surface, occasionally plunging. **Food :** small fish.

Status : Rare. A single sight record of a flock of 8 birds at Fort Cochin on 5/5/1990 (Neelakantan *et al*, 1993)

Distribution : Rare migrant to the east coasts of India. Two races -*sumatrana* and *mathewsi* visit India. Breeds in Maldives and Andaman Nicobar Islands.



64. Common Tern

Sterna hirundo Linnaeus
Chorakkali aala

Field characters : Size : (36 cm) Black-headed Gull -. Fast wing beats, but graceful.

Adult non-breeding : Upperparts ashy grey. **Head :** forehead white or mottled white, hindcrown and nape black, streaked white in some. Blackish band on leading edge of the inner half of pearl-grey upperwing. Rump, uppertail-coverts and tail paler than mantle. **Tail deeply forked, outer webs of outer rectrices blackish.** Underparts from chin white. Bill fully black or with reddish base. Legs dusky red to black. Larger size, extensive black on nape and shape of tail separates it from non-breeding Whiskered Tern. **Closed wingtips almost equal tailtip.**

Adult breeding : Glossy black cap, pale grey upperparts. Outer primaries darker grey than inner appearing as a **dark wedge at wingtips.** Bill orange-red with black tip, legs orange-red. Underparts white.

Juvenile : Like adult non-breeding, upperparts with buff and brown markings. Dark carpal band and a dusky trailing on inner wings.

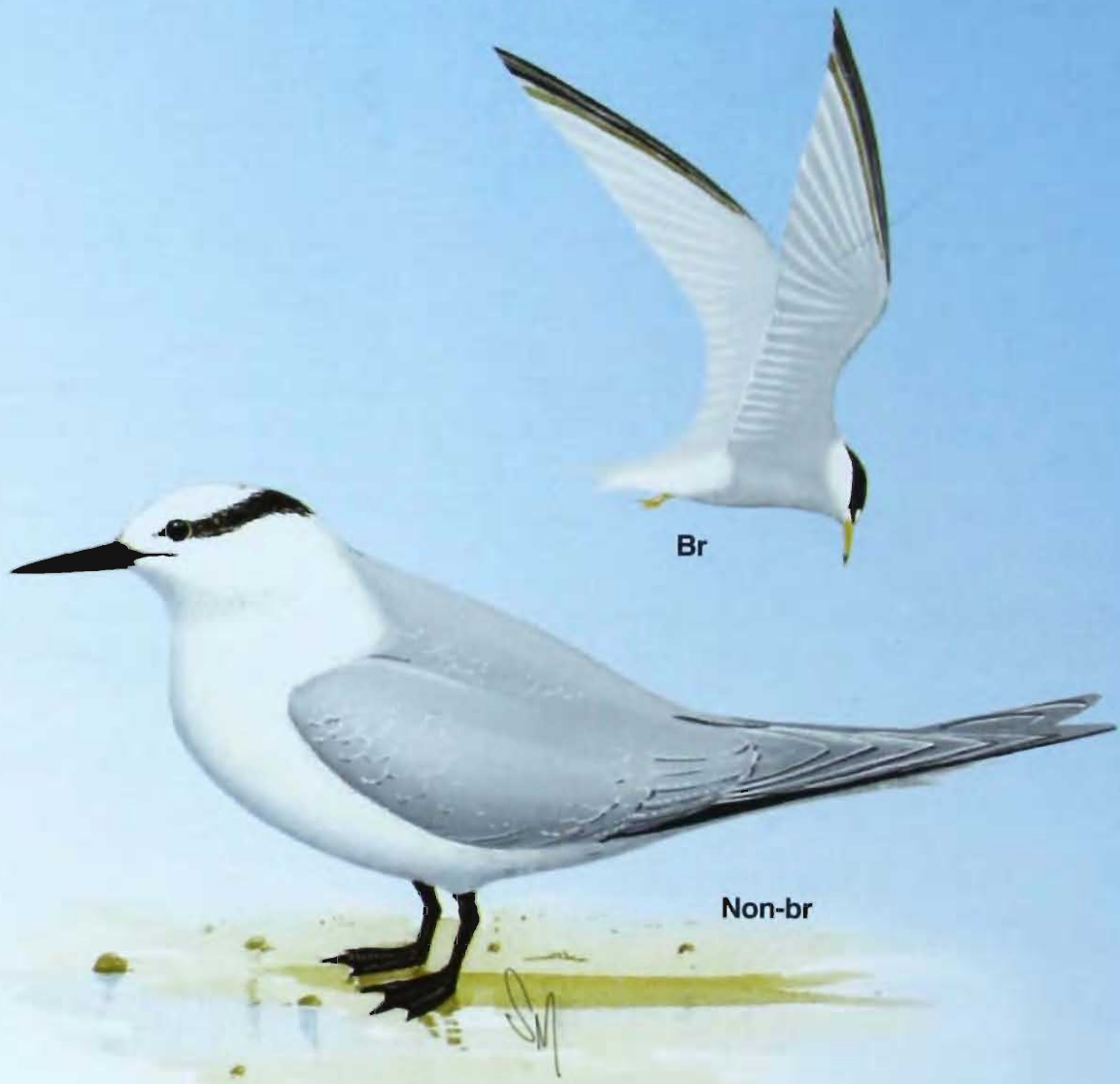
Voice : Ringing *kirree jay; kirri-kirri...; kek-kek-kek.*

Habitat : Seacoast, estuaries.

Habits : Gregarious. Hunts by plunging. Rests on estuarine mudflats and sandbars in association with other tern and gulls.

Status : Winter visitor. Not uncommon.

Distribution : Winter visitor to the coasts of India, Pakistan, Bangla Desh, Sri Lanka, Nepal and Maldives. Breeds in Palaearctic Europe and Asia. The races- *hirundo* and *tibetana* occur in India. *tibetana* has been recorded breeding in high altitude lakes of Ladakh at about 3500m. Also winters in S and SE Asia.



65. Saunders's Tern

Sterna saundersi Hume

Aalachinnan

Field characters : Size : (23 cm) Whiskered Tern -. A small white tern. Similar to Little Tern *Sterna albifrons* Pallas, which also possibly occur here.

Adult non-breeding : Upperparts pale grey. Head : white, black at nape and a thin line to eyes. **Wing pattern distinct: pale grey with dark bar on forewing formed by dark lesser coverts, black outer primaries and a white triangular patch on the rear edge.** Bill black, occasionally with yellow-olive base, legs black (This plumage is indistinguishable from Little Tern, *Sterna albifrons*).

Adult breeding : Upperparts pale grey. Head: crown, nape and loreal stripe black, forehead white (**not** extending as a short supercilium above eye, as in similar Little Tern). Upperwing pale grey with contrasting black leading edge of outer wing formed by the three black outer primaries (the contrast is less in Little Tern as the outer primaries are greyish). Underwing white, outer primaries black on underside also. Rump, uppertail-coverts, tail pale grey. Tail moderately forked. Bill yellow with black tip. Legs yellowish brown.

Juvenile : Similar to non-breeding.

Voice : *kit-kit* or *kewiririk* , similar to Little Tern, less sharp.

Habitat : Almost exclusively at seacoast. (Little Tern affects inland freshwater habitats also.)

Habits : Single or small loose flocks. Preys by hovering over water habitually before plunging vertically or at an angle, skimming briefly. Takes flying insects also. Wingbeats faster than other terns' Food : small fish, insects, crustaceans.

Status : Winter visitor? Locally common.

Distribution : Resident mainly to the west coast of India, Pakistan, Sri Lanka, Nepal, Maldives and the coasts of Africa and Middle East. Nearest breeding place is Vattakkottai, near Kanyakumari recorded in 1961 (Neelakantan *et al.*, 1993).



66. White-cheeked Tern

Sterna repressa Hartert

Charavaalan katalaala*

Field characters : Size : (35 cm) Black-headed Gull -. Similar in appearance as Common Tern.

Adult non-breeding : Upperparts ashy-grey, paler towards rump. Head: white, blackish patch from eyes become extensive at nape and hindcrown, the hood broader than on Common Tern. Upperwing deep grey; primaries with dark grey tips forming a trailing edge on outer wings; while outer web of the outermost primary is dark grey, those of inner primaries silver grey forming a pale panel on outer wing (visible only on fresh plumage). Underwing grey with a dark trailing edge as above. Underparts white. Tail uniform grey, deeply forked. Rump greyer than in Common Tern. Bill blackish red, legs red to blackish red.

Adult breeding : Upperparts dark ashy-grey. Black cap from upper lores, separated from lilac-tinged ashy-grey underparts with a white facial stripe (cheek). Bill dark blood red at base, black on terminal half, with a pale tip. Legs bright red.

Juvenile : Like adult non-breeding, wing pattern different. Brown tips of the secondaries and most of the primaries form an indistinct trailing edge; a blackish-grey carpal bar.

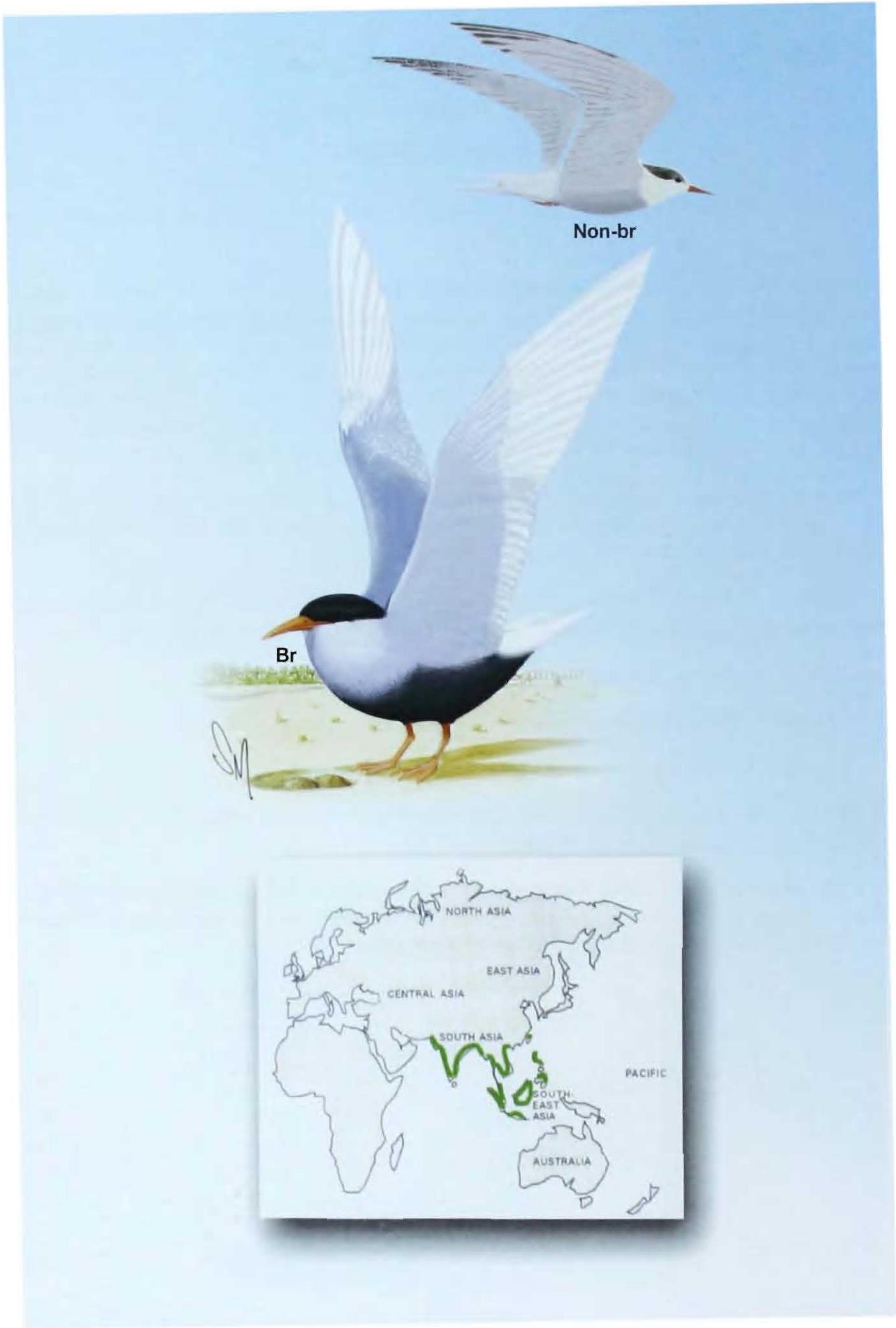
Voice : Similar to Common Tern.

Habitat : Maritime, also on seacoast.

Habits : Gregarious. Typical sea tern, hunts by plunging.

Status : Winter visitor. Rare. Only sight record is of 35 terns seen at Fort Cochin by Ole F Jakobsen (Neelakantan *et al.*, 1993).

Distribution : Rare winter visitor mainly to the coasts of India, Pakistan, Bangla Desh, Sri Lanka, Nepal and Maldives, E Africa, Middle East. Breeds within our limits on Vengurula rocks off Malvan on the Ratnagiri coast of Maharashtra.



Non-br

Br



67. Black-bellied Tern

Sterna acuticauda J.E. Gray

Karivayaran aala

Field characters : Size : (33 cm) Black-headed Gull -.

Adult non-breeding : Upperparts and upperwing ashy-grey. Head: white with a black cap after a short period with streaky white crown and forehead and a black hood around eyes to ear coverts. Underparts white, occasionally with black smudges. Underwing white. **Tail ashy-grey, deeply forked, but without streamers. Bill orange with dark tip, legs orange-red.** Colour of bill separates it from River Tern and winter Common Tern.

Adult breeding : Upperparts ashy-grey. **Head with black cap extending to nape.** Chin, throat and cheeks white. **Underparts : upper breast grey, growing darker towards black belly and vent.** Upperwing ashy-grey; in fresh plumage, primaries and primary coverts whitish-grey forming a pale panel on outer wing; underwing white. Tail deeply forked with white tail-streamers. **Bill orange.** Colour of bill and legs, shape of tail separates it from breeding Whiskered Tern.

Juvenile : Sandy upperparts and head, the latter with dark mask and streaking as in adult non-breeding. Brown fringes to mantle, back and tertials; grey primaries, inner ones with broad buff tip. Tail with brown subterminal bar. **Immature :** Like adult non-breeding, juvenile tertials, primaries and tail retained.

Voice : Shrill *kek-kek*. Sharp *kreek-kreek* while mobbing intruders in nesting area.

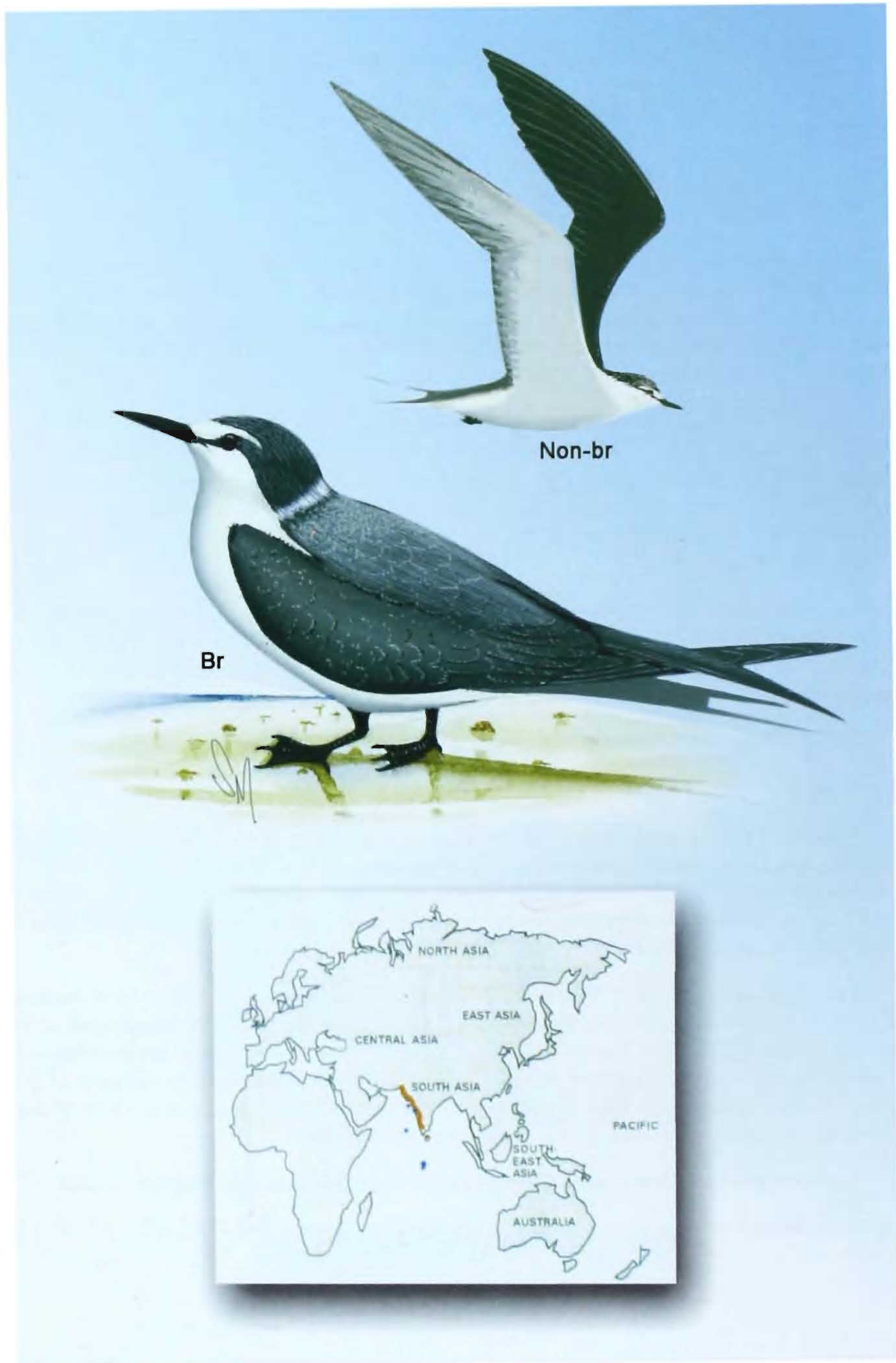
Habitat : Inland rivers, lakes. Not seen on seacoast.

Habits : Pairs or small flocks. General behaviour similar to River Tern's. Has a penchant for catching flying insects on the wing or picking them up from the water surface. Flies low over water against wind over water, scanning the surface methodically and takes prey by plunging or occasionally skimming; returns to the starting point by flying high down wind, to start hunting once again. Food : mainly fish, insects and crustaceans.

Breeding : Colonial, along with pratincoles and other terns on sandbanks or islets on rivers. Clutch 3, but occasionally 2 or rarely 4. Egg: broad ovals, very slightly compressed at the smaller end; size 32.4 X 24.9 mm. Ground colour variable from pale to dark sandy, occasionally with greenish tinge; speckled with reddish or purplish brown and secondary markings of pale grey or pale purplish grey. Both sexes share parental duties. Incubation period 15 or 16 days. Breeding recorded at Bharathapuzha sandbanks near Shoranur.

Status : Resident. Uncommon. Only recorded from Palakkad and Thrissur districts.

Distribution : A resident throughout India, Pakistan, Bangla Desh, Sri Lanka and SE Asia.



Non-br

Br



68. Bridled Tern

Sterna anaethetus Scopoli

(Brown-winged Tern)

Thavittuchirakan aala

Field characters : Size : (37 cm) Black-headed Gull -. A medium sized tern with dark upperparts and white underparts.

Adult non-breeding : Like breeding (see below) but has brown crown with white scaling.

Adult breeding : Upperparts including upperwings and tail dark greyish-brown. Head : crown, nape and a broad loreal stripe from bill through eyes to nape black; forehead and a long **supercilium extending beyond eye white. Distinct greyish or whitish hind collar.** Underparts including undertail white, underwing white with brown quills. Deeply forked tail. Outermost rectrices white. Bill and legs black. Distinguished from similar Sooty Tern by long supercilium, presence of hind collar, smaller size and brown upperparts.

Juvenile : Like non-breeding, upperparts pale brown with rufous-buff fringes of feathers.

Voice : Hoarse *krek* , high *kee-yharr*.

Habitat : Pelagic.

Habits : Gregarious, small flocks of 5 or 6 found offshore or far out in the open sea. Feeds by plunging from above to catch fish, following shoals. Rests on rocks, ships' rigging, buoys or floating wreckage.

Status : Rare straggler. 2 dead specimens, probably windblown, at Poovar, Thiruvananthapuram district in November 1978 and March 1979 (Neelakantan *et al.*, 1993).

Distribution : Pelagic tern, straggler to the coasts of western India, Pakistan and Sri Lanka. Breeds on Vengurla Rocks off the Ratnagiri coasts, Lakshadweep and Maldives Islands. Also breeds at many other tropical and subtropical islands in all the major oceans.



69. Sooty Tern

Sterna fuscata Linnaeus
Karinchirakan aala

Field characters : Size : (43 cm) Black-headed Gull. Similar to Bridled, blackish upperparts.

Adult non-breeding : Similar to breeding, but black of head streaked white; upperparts may be faded and may have white fringes.

Adult breeding : Upperparts blackish brown. Head: crown, nape and loreal stripe through eyes to nape black. Broad forehead extending over eye (not beyond as in Bridled), chin, throat and breast contrastingly white; abdomen and undertail-coverts greyish. Upperwing black with white marginal coverts, underwing white, quills brownish. Tail deeply forked, black, outer rectrices white; undertail whitish with central rectrices tipped brown. Bill and legs black. **Absence of long supercilium and hind collar, larger size separates it from Bridled Tern.**

Juvenile : Like adult non-breeding, upperparts dark brown, underparts whitish with variable mottling.

Voice : The *wide-awake* call distinct. Also a nasal *ker-wacky-wak*.

Habitat : Pelagic.

Habits : Gregarious. Invariably seen over the open sea, hardly ever coming to land except while breeding; apparently sleeps on wing too. Associates with other seabirds in following shoals of fish; preys by scooping from surface, rarely plunging.

Status : Rare straggler, probably storm blown. One specimen each from Malappuram district (Mathew & Shukkoor, 1974) and Kannur (in BNHS museum collection, 1996).

Distribution : A pelagic tern, vagrant to the coasts of India, Sri Lanka, rarely to Islands. Breeds in Lakshadweep Islands, Vengurula rocks off the Ratnagiri coast and Maldives. Also breeds in Islands of Indian Ocean, China Sea, Sulu Sea.



70. Whiskered Tern

Chlidonias hybridus (Pallas)

Kari aala

Field characters : Size : (25 cm) Pigeon -, slimmer. A medium sized tern inseparable from inland marshes.

Adult non-breeding : Upperparts more or less homogeneously pale grey. Head : fore-crown white, crown blackish heavily streaked white having the appearance of a cap or most often only with a black spot at ear-coverts; a black band through eyes around nape. Underparts white. Tail with a shallow fork; closed wingtips extend beyond tail. **Rump pale grey, no contrast with mantle. Bill and legs blackish or reddish.** (For differentiation from similar White-winged, see that species)

Adult breeding : Upperparts grey. Head : black cap separated from dark grey underparts by conspicuous white cheeks (whiskers). Vent and undertail-coverts and underwing-coverts white contrasting with underparts. Bill and legs red. Differentiated from adult breeding Black-bellied Tern by white ventral area and colour of bill. Birds in transitional plumage with large dark grey smudges on underparts and partial cap could be seen in April.

Juvenile : Almost similar to non-breeding, blackish-brown scapulars buff tipped, appearing as broad bars, lesser and median coverts brownish contrasting with grey wings and upperparts; a dark bar on forewing, tail grey at base with dusky tip. Head with more extensive blackish hindcrown and nape. Underparts white with brownish marks on sides of breast. Bill black, legs reddish brown.

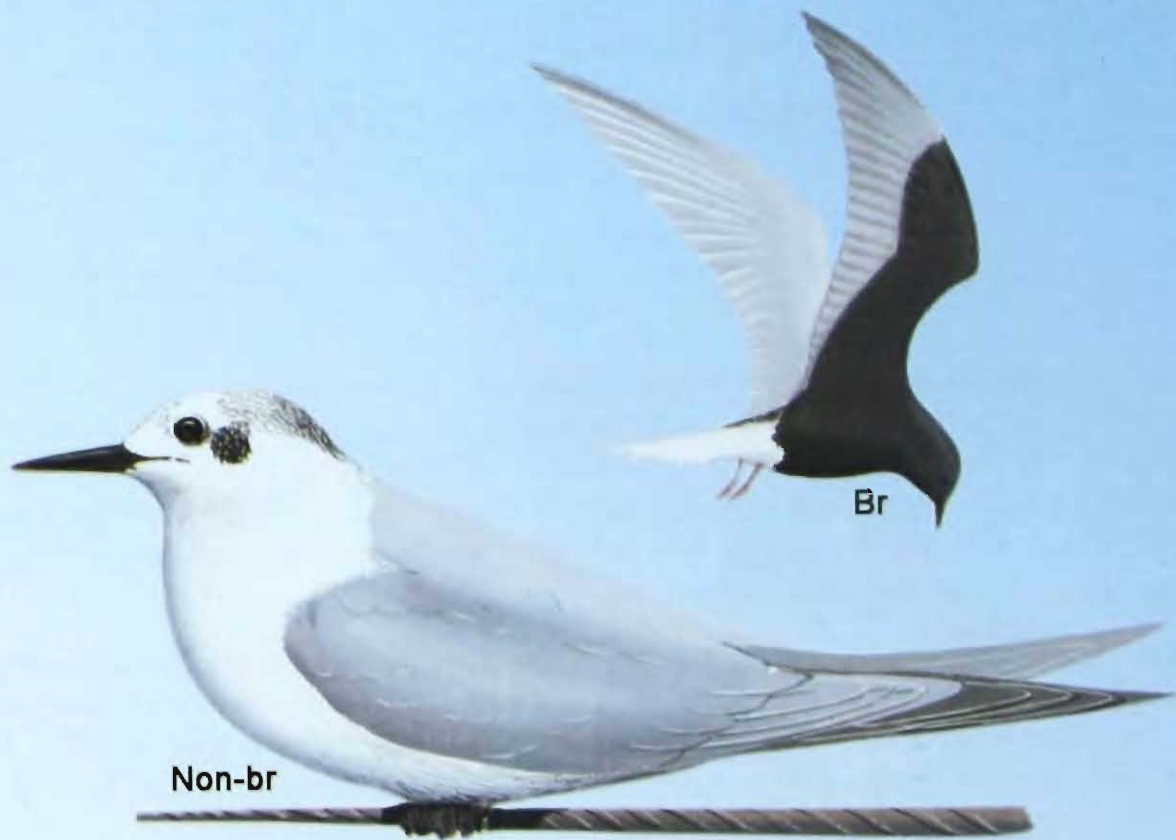
Voice : A sharp *kreak, kreak*.

Habitat : Backwaters, rivers, paddy fields, coastal lagoons, creeks.

Habits : Gregarious. Small flocks or single birds fly over water with slow graceful wingbeats, sometimes against breeze, methodically searching the surface for food, bill pointed downwards. Picks food mostly from surface of water, rarely plunging like *sterna* terns. Also feeds over cultivated land. Food : insects and their larvae, fish, crab. Very large groups roost on harvested paddy fields or on power lines over wetlands.

Status : Widespread winter visitor. Common. By far, the most numerous of our terns in large wetlands like the Kole, Thrissur District.

Distribution : Common winter visitor to India, Pakistan, Bangla Desh, Sri Lanka, Nepal, Maldives and Middle East. Breeds in Kashmir and northern India.



71. White-winged Tern

Chlidonias leucopterus (Temminck)
Vellachirakan aala

Field characters : Size : (23 cm) Whiskered Tern -. Difficult to distinguish from Whiskered Tern in non-breeding plumage.

Adult non-breeding : Upperparts grey. Upperwing evenly grey, outer primaries with black outer webs. Underparts white. Head: forehead white, crown and nape black speckled white, irregular black patches may be present, also a spot on ear-coverts. **A complete white collar behind neck.** Tail white or pale grey, shallow fork. **Rump paler than back. Bill and legs blackish.** Some individuals retain black in axillaries or under wing-coverts.

Adult breeding : Head and upperparts black contrasting with pale grey upperwing-coverts and white rump and tail. Underparts and underwing-coverts black, vent and undertail-coverts white. Bill and legs red.

Juvenile : Like non-breeding, but blackish-brown scapulars without pale bars (which separate it from immature Whiskered Tern) and contrast strongly with the white rump. Head with larger black area, neck white. Dark band on leading edge of wings. Bill black, legs reddish or flesh grey.

Voice : Similar to Whiskered tern, harsh *kerrek* or *kirrek*.

Habitat : Inland marshes, paddy fields, backwaters.

Habits : Gregarious, often in association with Whiskered Terns, has similar habits also.

Status : Winter visitor. Uncommon. A single published record from Kole wetlands (Ravindran, 2001). Recorded at Kattampally also. Overlooked, probably.

Distribution : Uncommon winter visitor to most of Indian peninsula regularly visits Assam, Bangla Desh and Sri Lanka in winter. Breeds in S Europe and C Asia, wintering in Africa, India and Malaysia to Australia.

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GLOSSARY

Accidental : Stray, out of normal range

Adult : A bird that has attained definitive plumage

Axillaries : a small tuft of feathers in the axilla (arm-pit)

Band : (Bar), A term applied to the dark or pale bands on either side of the wing or on the tail or other parts of the body

Bill length : A straight distance between the base of the skull and the tip of the bill.

Breast-band : (Pectoral band) A bar or band across the breast that differs in colour from the surrounding areas.

Buff: A light yellow.

Carpal joint : The wrist joint, the bent of the wing.

Carpal patch : A patch on the wing near the carpal joint differing in colour from the surrounding areas.

Cheek : Rather vague term applied to the side of the face below the eyes.

Collar : A band fully or partly around the neck.

Coronal stripe : A stripe along the middle of the crown.

Coverts : Rows of overlapping feathers covering certain features such as the ear, the rectrices and remiges above and below.

Crepuscular : Active at dawn and dusk.

Crest : Tuft of feathers sticking out on the head of a bird.

Eye-stripe : A dark band from the bill through the eye.

Emargination : 'A narrowing of the web on one side (usually the outer) of the feather towards the tip producing a tapered effect' (Thompson, 1964)

Endemic : Restricted to a particular region.

Flank : Side of the belly normally hidden under the folded wing.

Flight feathers : The primaries, secondaries and tail feathers together.

Foreneck : The lower part of the throat.

Frontal band : A band on the forehead.

Fulvous : (Tawny)- a dull brownish yellow or brownish orange

Gape : (Rictus)- the joint of the upper and lower mandibles.

Gonys : The ridge at the lower mandible near its tip

Gorget : A line from gape encircling the throat.

Holarctic : A geographical term for the area comprising most of North Asia, ~~North America~~ and part of North Africa.

Immature : Refers to all stages in the growth of a chick till it assumes adult plumage.

Iris : The part of the eye surrounding the pupil.

Juvenile : A young bird still wearing its first plumage of true feathers.

Lateritic plain : Lateritic rocky land covered with scrub vegetation.

Lore : The area between the base of the upper mandible and the eye.

Malar : The area on the side of the face immediately behind and below the base of the lower mandible.

Mantle : A term for the feathers of the upper back, the scapulars and the wing-coverts taken together.

Mirror : The white patches in the black tip of wings.

Orbital ring : A conspicuous ring round the eye.

Over-wintering : A small population of winter migrants staying over in the wintering ground after the wintering period.

Pelagic : Of the ocean; oceanic

Palaearctic : Zoological regions comprising the whole of Europe, Africa north of the Sahara, the arctic, boreal and temperate Asia north of the Himalayas.

Polyandrous : A female mating with more than one male

Primaries : the long feathers of the wing attached to the bones of the hand or manus.

Rectrices : Tail feathers

Remiges : The primaries and the secondaries together

Rump : The lowest part of the back just above the upper tail-coverts.

Secondaries : the long feathers of the wing attached to the forearm or ulna.

Scapulars : The feathers covering the shoulder and the base of the wing on both sides of the back.

Shaft : (Rachis) – The central spine of a feather to which the vanes or webs are attached.

Shaft-streak : A streak formed when the colour of the shaft is different from that of the webs or vanes of a feather.

Supercilium : A stripe above the eye; also called eyebrow.

Tarsus : The lower part of the leg to which the toes are attached.

Tertial : (Tertiary) – Applies to the secondaries borne on the humerus and not on the ulna; these are the secondaries closest to the bird's body.

Trailing edge : the rear edge of an extended wing.

Underparts : The ventral side of a bird's body from throat to under tail-coverts.

Upperparts : The dorsal side of the body including the back and the upper surfaces of the wings and tail.

Vagrant : Wanderer or wandering; rare and of random occurrence.

Vent : Loosely applied, it refers to the under tail -coverts; strictly, the area around the cloaca or the anal orifice.

Vermiculation : Irregular wavy lines on the plumage.

Vinous : Wine-coloured, a sort of dark red.

Wattle : A piece of bare skin growing on some part of the head or neck

Wing bar : A line of contrasting colour across the bird's wing made by markings on the wing-coverts; or a bar of contrasting colour formed when the bases of remiges are white.

Wing length : The straight distance between the bend of the wing and the tip of the longest primary.

Wing lining : A comprehensive term for the under wing-coverts.

Wing span : The straight distance between the tip of one wing that of the other when the wings are fully spread.

Table-1 : Identification of Snipes – some hints.

Species	Size	Habitat	Flight when flushed	Bill	Tail	Call	Diagnostic features
Wood Snipe	Large	Hill swamp	Bat like, rounded wings	Horny-brown, basal 2/3 of lower mandible yellowish	Tipped pale grey except central rectrices	Deep <i>tok-tok</i>	Larger size
Pintail Snipe	Medium	Coastal & inland marshes, wet paddyfields	Rapid zigzag, with call	Relatively shorter, dark brown with greenish base	Outer rectrices pin shaped	Rasping <i>squak</i> or nasal <i>scape</i>	No white trailing edge on wings, dark heavily barred underwing and axillaries
Swinhoe's Snipe	Medium	Marshy shores of lakes, and backwaters, Paddyfields	Heavier, less erratic than Pintail		Longer tail extend beyond wingtips; white on corner	Less harsh than Pintail	In flight, toes trail beyond tail than in Pintail
Common Snipe	Medium	As above, prefers softer mud	Rapid, extremely erratic	Dark brown with reddish base	Dark brown, narrowly tipped white	Harsh <i>scaap</i> (similar to Pintail)	Broad white trailing edge on inner wing, large white belly patch, paler underwing
Jack Snipe	Small	Waterlogged paddyfields, edge of backwaters	Flies on closer approach only, drops to cover close by	Short, black tip, fleshy base	All black, wedge shaped	Silent in winter	Small size, dark crown, narrow white trailing edge of wings.

Table-2 : Identification of non-breeding Terns.

Species	Size	Tail	Bill	Legs and feet
Gull-billed Tern	Large	Shallow fork	Black, stout	Black
Caspian Tern	Very large	Shallow fork	Red	Black
River Tern	Large	Deep fork	Yellow, heavy	Red to orange
Lesser Crested Tern*	Large	Moderately forked	Greenish-yellow, large	Black
Large Crested Tern*	Medium	Moderately forked	Orange-yellow, slender	Black
Sandwich Tern	Medium	Moderately forked	Black, tipped yellow	Black
Common Tern	Medium	Deep fork	Black, reddish base	Reddish black
Whiskered Tern*	Small	Shallow fork	Blackish (with reddish tinge)	Blackish or reddish
White-winged Black Tern*	Small	Shallow fork	Red	Red
*see text for other diagnostic features				

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