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# Common Birds of Kerala



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Division of Forest Ecology and Biodiversity Conservation



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#### 1. Introduction

Books available on the birds of Kerala are published by Dr. Salim Ali (Birds of Kerala) and the classical Malayalam book by K.K. Neelakantan (Keralathile Pakshikal). An addition to the Birds of Kerala was published by Sasikumar *et al.* (1993) including the newly discovered bird species from Kerala. Another book on the Waders of Kerala was published by Sasikumar *et al.* (2005). An inventory on the birds of Kerala was published by Easa and Jayson (2004). This publication will be useful to the bird watchers, students, naturalists, conservationists and to the scientific community. Available data on the birds of Kerala was collected from literature and reprints. In addition to these, notes were added from the personal observation on birds in the field. Basic information on morphology and behaviour was adopted from published material.

Order: Podicipediformes

Family: Podicipedidae

#### 1. Species Name: Little Grebe Tachybaptus ruficollis (Pallas, 1764)

It is the commonest bird mostly found in the water bodies. It moves swiftly over the water surface occasionally diving for the prey. Normally it is drab coloured and duck-like in appearance. The lower parts of body are silky white coloured, the beak is pointed and tail short. During the breeding period the bird assumes darker plumage, head and neck become dark brown, lower neck sometimes assumes paler colour or chestnut colour and under parts become smoky white. Sound of this bird is a sharp tittering heard only at evening, but 'click' type sound is also reported. Sexes alike and size is about 23 cm. **Habit:** Pairs, parties of 3 to 4 or small-scattered flocks. **Habitat:** Inland wetlands with or without floating vegetation, ponds, village tanks, rain water ditches, mostly all wetlands containing floating vegetation, pools, lakes etc. **Status:** Resident. Local movement is common. **Food:** Aquatic insects, tadpoles, frogs, small fishes and crustaceans. Mostly chase the prey and catch it. **Nesting:** April to October. Nest is floating vegetation composed of raft, debris, weeds etc. It may also be submerged to half due to its weight. **Eggs:** 3-5, white; but become brown due to the quality of the nest and activity of the bird. It covers up eggs with debris.

**Distribution:** Throughout Kerala. Kole wetlands of Thrissur, Palghat (*Capensis* race is found). Found up to 2500 M elevation. Reported from entire south Western India. Found in weed covered village tanks and puddles. Nesting season in Travancore is August and it makes calls during June and July. No detailed studies were carried out on this species.

Order: Pelecaniformes

Family: Pelecanidae

#### 2. Species Name: Spotbilled Pelican Pelecanus philippensis Gmelin, 1789

It is a large water bird 152 cm in length and 68 cm height. The colour of the bird is diagnostic and it shows two variations in colour pattern during adult and immature stages. The grey colour of the adult is diagnostic which varies between grey to greyish white. The beak is flattened. The legs are stout, with large webbed feet. Sexes alike. Greyish brown tail is diagnostic. Immature one is with brown and white. Habit: Pairs or flocks. Habitat: Ponds, large lakes, reservoirs and rivers, fresh water lakes, brackish lagoon. Found in all well-watered tracts. Status: Resident with migratory populations. Food: Fish. Nesting: November to April. Nest is a large platform on trees and palms, it is far from water bodies and a tree bears many nests. Colony may cover very large area. At Pullu near Thrissur they were nesting on lofty coconut palms near the paddy fields. Eggs: 3, Chalky white, during incubation the colour may change into dirty white. Distribution: Thrissur Kole, Kattampalli, Akkulam, Vembanad. Recorded from Pullu at Kole wetlands during April 1998. Kannan and Manakadan (2005) reported the status and distribution of Spotbilled pelican in southern India. The species is in near threatened (NT) category of IUCN.

Order: Pelecaniformes

Family: Phalacrocoracidae

#### 3. Species Name: Little Cormorant *Phalacrocorax niger* (Vieillot, 1817)

One of the common birds found in the wetlands. It is a black duck-like water bird and supposed to be the smallest of cormorants. It is of about 51 cm long with stiff, tail. The bill is sharply hooked at its tip. During breeding season the bird is glossy black; shorter crest of white feathers on head also found. During normal conditions crest is absent and glossiness of black is reduced and white patch on the under parts appears. Immature ones light brown and under parts contain white portions. Sexes are alike. **Habit**: Single, two or threes in small tanks, ponds; large flocks in inland wetlands. Usually seen drying wings in open position, perching on

branches of nearby trees. Habitat: Ponds, tanks, estuaries, hill-streams, lakes. reservoirs and all kinds of water bodies. Sometimes it is found in brackish water also. Status: Resident with migratory populations, but shows local movements also. Food: Exclusively fish; chasing and capture method is followed. Nesting: November-February in southern parts, but variations reported from other parts of India. Nest is simple, platform of twigs and no other materials found mixed with it. It nests among other species like Black crowned night heron. Nest may be nearby or far from water sources. Breeding season may vary with water conditions. Common crow is found to be the main predator of eggs and nestlings at Mangalavanam, Cochin. Nesting was observed during June-July in Mangalavanam Bird Sanctuary during 2000. In the periphery of Trichur Kole lands it build nests on the neighbouring compounds. Many nests are destroyed by local people to get rid of the birds from the private compounds and people usually cut the branches of the trees where nests are placed. Death of nestlings was reported in such activity. Eggs: 4-5 pale or a mixture of blue, green. Distribution: Throughout wetlands of Kerala. Commonly seen at Mangalavanam (1998), Thrissur Kole wetlands, Chimmony Wildlife Sanctuary and Peechi- Vazhani Wildlife Sanctuary. No detailed studies were conducted on the species in Kerala.

Order: Pelecaniformes

Family: Anhingidae

#### 4. Species Name: Darter, Snake Bird Anhinga melanogaster Pennant, 1769

The name Snake bird is due to its appearance as a snake, while swimming. The body remains fully submerged, neck and bill are exposed to outside. The bird is similar in appearance to Cormorants. The mature bird is black and some streaks of silver are also found. The neck is of brown to chocolate in colour and sometimes resembles snake. Throat is white coloured and immature bird is pale brown. Size ranges from 90 cm to slightly greater than 90. Tail is long and stiff and dagger like bill is distinct. Sexes are alike. Usually seen on branches of trees near the water bodies drying the wings in open position. Habit: Scattered (two to three individuals), large congregation. Habitat: Lakes, costal waters, estuaries, all type of inland water bodies, including tanks, reservoirs, hill streams, rivers etc. The bird is very famous at Periyar Tiger Reserve where they perch on the polls in the lake and move away when the tourist boats approaches them. Similarly, they were found in Thunakkadavu Reservoir in Parambikulam Wildlife Sanctuary during 1985. Status: Resident. It also exhibit local migrations. Food: Mainly fish. Nesting: November - February. Nest is a

platform of twig and usually found along with herons and similar type of birds. They are placed near the water bodies and sometimes individually also. Eggs: 3-4; it is not smooth rounded and coloured with a mixture of blue and green. Distribution: Throughout wetlands of Kerala and nesting in Travancore during September is recorded. They are also found in Thekkady Lake (1981-1982), Parambikulam (1988), Kole wetlands, Chimmony Wildlife Sanctuary and Peechi- Vazhani Wildlife Sanctuary. At Irinjalakuda they nested near Railway Station compound on tall tress.

Conservation Status: Near Threatened.

**Order: Ciconiiformes** 

Family: Ardeidae

#### 5. Species Name: Little egret Egretta garzetta (Linnaeus, 1766)

Most commonly seen bird in the wetlands of Kerala. Little egret is diagnostically identified from other egrets by black legs, dirty yellow feet and black bill. It is of medium size and during breeding season filamentous plumes developed in the body. Two narrow plumes extend from neck directing towards back. But during non breeding season it is absent. Sexes are alike. The neck attain the shape of 's' alphabet. Size ranges about 60 cm. Bill show wide variations of paler, pinkish, greyish, dull yellow etc. Habit: Pairs or flocks (small to large flocks). Habitat: Back waters. In coastal areas, it is rarely found. Common in water logged cultivation lands, ponds, marshy areas, mudflats, mangroves swamps and tidal estuaries. Status: Resident. It shows local movements according to water conditions. Food: Fishes, (small ones preferred), aquatic insects, amphibians and small reptiles. It follows watch and waits method for feeding. Nesting: November - February. It is platform type, smoothed with other materials. It nests mixed with herons. Both sexes take part in nesting. Egg: 3-5 pale mixture of blue and green. Distribution: Throughout Kerala, and very common in Kole wetlands of Thrissur, Chimmony Wildlife Sanctuary and Peechi- Vazhani Wildlife Sanctuary.

Order: Ciconiiformes

Family: Ardeidae

#### 6. Species Name: Grey heron Ardea cinerea Linnaeus, 1758

As the name indicates the bird is grey in colour all over body. Under parts bears white colour, it is not pure white. Some plumes in the head are directed backward. Neck is long and it normally attains the shape of alphabet 's' and it may contain some black spots. The bill is long and thinner. Legs some times attain yellow

tinge. The greyish colour of the bird is diagnostic. Immature one contains paler compositions. Sound is harsh. Habit: Solitary, occasionally small flocks, Habitat: Almost all water bodies including tank, lake, river, estuaries, mangroves, swamps, tidal creeks, back waters, saltpan, rocky water shores. It is a crepuscular bird. Status: Resident. Passage migrant or winter visitor. Food: Small fishes, tad poles, frogs, crustaceans. It waits for food and captures it. Nesting: July - September or November - March in South India. Nest is a platform composed of twigs. It may be lined with soft materials like leaf, grass etc. Eggs: 3-6 deep colour composition of blue and green. Both sexes have their own role in duties. Distribution: Height up to 1400 m in our country. Reported from Trivandrum zoo, Kole wetlands. No serious studies done on this species in Kerala.

Order: Ciconiiformes

Family: Ardeidae

#### 7. Species Name: Large egret, Great egret Casmerodius albus Linnaeus, 1758

Large egret is a long bird with white colour. Ornamental plumage is developed in breeding season. It is distinguished from other egrets by its long, thin neck, sharp bill. Legs and feet are black, some kind of red, pinkish, tinge are also present. During breeding season ornamental plumage may be developed. Size may range about 63 cm. It is difficult to identify from other egret in non-breeding season with yellow beak. Habit: Usually solitary, sometimes two or three individuals. Habitat: All kind of water bodies including marshes, tidal mudflats, paddy fields, salt pans etc. Status: Resident. It also shows local migrations, which may be due to local water conditions. Food: Fishes, amphibians, reptiles, Molluscs etc. Nesting: July - February. Local variations are also reported and south - west monsoon is preferred. It's nest is a platform, composed of sticks. It may be found near or away from water bodies and reported from urban areas mixed along with herons. Eggs: 3-4, Pale colour composed of green. Both sexes have their own role in duties. Distribution: Kole wetlands and other areas.

Order: Ciconiiformes

Family: Ardeidae

#### 8. Species Name: Median egret Mesophoyx intermedia Wagler, 1829

Median egret is intermediate to large egrets and small egrets. Size ranges about 60-65 cm. It can be distinguished from both egrets by its plumes on back and breast. Bill and neck are shorter than large egrets. The neck is some what's' shaped.

During non breeding seasons bill is yellow coloured, but during breeding season it is black coloured and feet also black coloured. Ornamental plumes are also developed during breeding. Median egret is found associated with herons and egrets. Other characteristics are similar to large egrets. Habit: Pairs or flocks (small). Habitat: Mostly associated with water bodies, estuaries and swamps. Found in wet paddy fields, marshes, tidal estuaries, coastal backwaters, mangrove swamps etc. Status: Resident. It shows local migration due to water conditions. Food: Amphibians, crustaceans, fish etc. Watch and wait method of feeding is adopted. Nesting: July -February. Nest is platform composed of sticks, twigs etc. Usually it is found in tall trees. Eggs: 3-5, pale composition of blue and green. Distribution: Kole wetlands and also throughout Kerala.

Order: Ciconiiformes

Family: Ardeidae

#### 9. Species Name: Cattle egret Bubulcus ibis (Linnaeus, 1758)

Name is due to its association with grazing animals. It is found very close to the grazing animals and in Kole Wetlands of Thrissur. The species now follows tractor, in the paddy fields. The bird is medium sized about 45 - 50 cm. The neck is shorter and thick. Position of legs during flight is diagnostic character. During non breeding season beak is yellow coloured and legs are black in colour. Generally head is rounded. In breeding plumes, head is yellow tinged. Sexes are alike. Habit: Parties. Habitat: Generally found in water logged areas and reported in paddy fields, wet lands, estuaries, open forests, marshes, tidal mudflats, etc. Status: Resident. Local migration is due to water conditions. Food: Grass hopper, flies, cicadas, other insects that fly due to cattle grazing, fish, frog and lizard also were reported. Nesting: November - March in south India. Nest is a platform, constructed during south-west Monsoon. Nest composed of twigs and is found in large trees, near to water bodies or noisy towns. Found mixed with other water birds. Eggs: 3-5, paler composition of blue. Distribution: Throughout Kerala. Kole wetlands, Kerala Agricultural University campus, Chimmony Wildlife Sanctuary and Peechi - Vazhani Wildlife Sanctuary.

Order: Ciconiiformes

Family: Ardeidae

10. Species Name: Indian pond heron Ardeola grayii (Sykes, 1832)

Indian pond heron is brown coloured in dorsal side and in neck it is paler. Commonly seen in water bodies of Kerala. The bill contains yellow tinge and its tip is dark shaded. Legs are greenish tinged. Streaks found all over body during breeding season. Generally harsh sound is produced but during breeding season it may show a wide variation. Colour composition of body is increased during breeding season. Under parts are white. Size ranges about 46 cm. Sexes alike. Habit: Single, pairs or parties. Habitat: Generally all water logged areas, mangroves, estuaries, swamps, cultivation lands, marshes, mudflats; paddy fields and towns are also favoured. Status: Resident. Local migrations are due to water conditions. Food: Fishes, frog. crabs, insects etc. Feeding is alone. Watch and wait method of feeding followed. Nesting: Breeding reported in colonies. South-West monsoon period or November -January is followed. Nest is a platform composed of twigs and is found in large, foliaged trees mixed with egrets. Eggs: 3-5, Paler composition of blue and green. Nesting recorded in Thrissur town. When they build nest in private holdings, owners usually turn hostile and adopt various methods to drive away the birds. Hostility is mainly due to the foul smell produced from leftovers which birds deposit on the ground below the nest. Heavy hunting of pond heron was reported from the Thrissur Kole fields before nineties. Distribution: Throughout Kerala. Kole wetlands, Kerala Agricultural University campus, Chimmony Wildlife Sanctuary and Peechi- Vazhani Wildlife Sanctuary.

Order: Ciconiiformes Family: Ardeidae

## 11. Species Name: Black Crowned Night heron Nycticorax nycticorax (Linnaeus, 1758)

This bird is coloured with stocky grey, black and white and it resembles Indian pond heron. The bill is not so long. Grey colour found on upper parts, but shoulder and adjacent regions are black and greenish buff on back. Occipital crest present, which may be of black in colour and juveniles are streaked. Immature ones are not streaked and spotted. Adult size is of about 58 cm and sexes alike. It is a gregarious bird and the sound is like croaking. **Habit:** Pairs or parties. **Habitat:** Inland and coastal waters. This includes ponds, tidal creeks, mangrove swamps, coastal back waters, tidal estuaries. Colonies are found on trees during daytime and it flies out for feeding at dusk. The bird is crepuscular and nocturnal. **Status:** Resident. Not so common. It has shown some kind of local migration. **Food:** Aquatic insects, frogs,

crabs, fishes and other aquatic organisms. **Nesting:** December – February in south India and April – September in North India. Nest is similar to Egrets and composed of twigs on a large tree. Nest will be close to water bodies or far away from it. **Eggs:** 4-5 pale colour of green. Both sexes have their own part in breeding duties. **Distribution:** Throughout Kerala. Kole wetlands, Kerala Agricultural University campus, Chimmony Wildlife Sanctuary, Peechi - Vazhani Wildlife Sanctuary and Mangalavanam bird sanctuary.

Order: Ciconiiformes

Family: Ciconiidae

#### 12. Species Name: Asian Openbill stork Anastomus oscitans (Boddaert, 1783)

Size of this bird is of about 80 cm and the bill is grey coloured or yellowish coloured. The colour of the bird is greyish tinged white, the wings attains black colour and the white colour is seen as patches, which is a diagnostic character. During breeding season it attains white. The bill has a small opening in normal position which is also a diagnostic character. The shape of the bill may be due to its feeding habits. Immature one has dark grey colour above and bill is closed. Sexes are alike. Adult has reddish colour on the legs. Habit: pairs or flocks (small to large flocks). Habitat: Flooded fields, tanks, tidal mudflats, inland wetlands, marshy swamps, estuaries etc. Status: Resident. Food: Frogs, small living things, insects, other aquatic organisms etc. Chief food consists of molluses, crabs, snails and such kind of organisms. The shape of the bill is adapted to crush them. Nesting: November – March in South India. It builds platform nest, the character is similar to other storks. The nest found among water birds. Eggs: 2-4, white coloured. Distribution: Kole, Kattampalli, Vembanad. It is common in Southern Kerala. Found in hundreds in Thrissur Kole wetlands and also in nearby paddy fields.

Order: Ciconiiformes

Family: Ciconiidae

#### 13. Species Name: Black stork Ciconia nigra (Linnaeus, 1758)

The bird is glossy black above with white under parts and tail is very short. During flight, white colour distribution of under parts is diagnostic. Eyes bear a light yellow line and beak is long and sharp ended which is reddish in colour. The legs are also reddish coloured. Shape of the neck is distinct from other storks. It is found among other storks. Habit: Pairs or small flocks of about 10 to 12. Habitat: Rivers, lakes, salt pans, marshy areas, swamps, tidal mudflats, inland wetlands. It is also

reported in open forests. It forms small flocks to Northward migration in spring. **Status:** Migrant. **Food:** All type of aquatic organisms in marshy areas and rivers. Food includes molluscs also. **Nesting:** April to May in Central Asia. It is platform nester. Nest composed of twigs, sticks. **Eggs:** 3-5, white coloured. **Distribution:** Periyar Lake, Thunakkadavu (Parambikulam 14/02/1984 and 16/02/1986), 07/01/1987 at Chamravattom (Malappuram District), Estuary of Bharathapuzha 16/02/1987, Malampuzha Reservoir, Thekkady 24/02/1987, Walayar Dam 12/01/1991, 16/01/1991, 25/01/1991 and Kole wetlands.

Order: Ciconiiformes

Family: Ciconiidae

#### 14. Species Name: Lesser Adjutant-Stork Leptoptilos javanicus (Horsfield, 1821)

Large bird with a size of about 110 cm and tall legs is ashy grey in colour. Beak is long and yellowish. The nostril opening on the bill is clear and is distinctly visible. The above parts are glittering black and the under parts are pure white coloured. Tail is short, black above and white below. During flight the white patch of under parts provide diagnostic character. Neck is not covered with feathers and it is yellow coloured. The immature birds have feathered neck. Habit: Single. Habitat: It bears all characters of adjutant. It is found in marshes, swamps, mangroves etc. Status: Resident but reported to show local migrations. Food: Fishes, frogs, reptiles and other type of invertebrates. Nesting: November-January. Nest is a platform of sticks and is found in tall trees. Egg: Similar to other adjutants. Distribution: Nesting not recorded in Kerala. It is found up to 600 m in Nilambur, Parambikulam and Wayanad. Entire South Western India up to at least 500 m.

Order: Ciconiiformes

Family: Threskiornithidae

# 15. Species Name: Oriental White Ibis, Black headed Ibis *Threskiornis* melancephalus (Latham, 1790)

Size of this bird is about 70-75 cm. The head and neck is unfeathered and it acquires black colour. So it has another name as black headed Ibis. Some times shoulders and wings attain grey colour during breeding season. Ornamentations are found in various parts of this bird during breeding season. Immature one has duller colour of adult and feathers found on the neck. Leg is black coloured. Beak is long and it is curved down. Tail is short. Sexes are alike. The bird is tall when compared with other Ibis. Habit: Pairs or flocks. Habitat: It immerses the bill into water for

feeding and found associated with shallow water bodies like ponds, lakes, etc. **Status:** Resident and local migratory. **Food:** Molluscs, fish, crustaceans. **Nesting:** November-February. It is platform nester, composed of twigs and sticks; it may be near to water or away from it. The bird is found mixed with other water birds. **Eggs:** 2-4, white colour with tinges of blue, green or brown. **Distribution:** Kole, Kattampalli, Vembanad. Since 1985, number of birds is reported from various parts of Kerala.

Order: Ciconiiformes

Family: Threskiornithidae

 Species Name: Black Ibis, Rednaped Ibis Pseudibis papillosa (Temminck, 1824)

The bill of this bird is long down curved and it has a yellow tinge and the eyes are reddish coloured. Tail is very short and black and wings have a white patch. Very small feathers are seen on the neck. On the head there is a red patch and it seemed to continue on the neck as small patches. Other parts of the head are black coloured. Facial parts are naked and black coloured. Immature one bears the dull colour of adult. Sexes are alike. It differs from other lbis by its mode of feeding and food. Habit: Pairs or scattered parties. Small flocks, sometimes large flocks, Habitat: Edges of river, tanks, harvested fields, marsh areas, wetlands, mud areas, swamps, tidal mudflats, inland wetlands etc. Status: Resident and local migratory. Food: As it feed on edge of wetlands, food is composed of insects, small reptiles found along the side of water, frogs etc. Nesting: Not recorded clearly. It is supposed to be in March-December. Nest is like a central hollow and is covered with grass, leaves, feathers and other similar particles. Vulture's or old eagle's nest also used. Eggs: 2-4, paler or bright composition of green. Spots or streaks may or may not present. Distribution: Kole, Kattampalli, flocks found on the trees in the bank of river in Manathavady, Wayanad, Kole wetlands, Trivandrum. Wide spread in south western India up to about 1000 m.

Order: Anseriformes

Family: Anatidae

17. Species Name: Lesser Whistling-Duck *Dendrocygna javanica* (Horsfield, 1821)

The bird is similar to Large Whistling-Duck but the size is smaller. This bird is brown coloured on upper and lower parts. But some white tinges are found below neck and shoulder parts. Upper body feathers have small lining of white colour. Tail

is not white. Ash coloured legs with webs between the fingers. Small lining of white feathers may be present around eyes. Sound is whistling type. Sexes are alike. Habit: Single or flocks. Sociable. Habitat: Fairly common bird found in almost all water logged areas. Vegetation rich areas more preferred. Vegetation covered inland wetlands, tanks, lakes, marshes etc. Status: Resident. Local migration is due to water conditions. Food: Similar to other whistling ducks and composed of vegetarian food and also fish, small aquatic organisms. Nesting: Monsoon period (June – October). Nest may be found in trees or around aquatic vegetation. Both sexes share nesting duties. Eggs: Up to 12, white. Distribution: Throughout Kerala. Kole wetlands, many times local people report the presence of this species near the paddy fields with ducklings.

Order: Anseriformes

Family: Anatidae

#### 18. Species Name: Brahminy shelduck Tadorna ferruginea (Pallas, 1764)

Size of this bird is about 60-67 cm. Sexual dimorphism is seen on the colouration of birds. Male bird has a black band on neck area. It's colour is increased during breeding season. Head is of some what yellow coloured. Wings are metallic black colour during flight and tail is black coloured. Female has no such bands. All other character is same. It has another name as ruddy shelduck. Habit: Single or Pairs. Habitat: Rivers, ponds, fresh water areas, wetlands, muddy shores etc. Status: Winter visitor. Food: Fishes, frog, reptiles, aquatic organisms and aquatic plants. Nesting: Not recorded in Kerala. It is a high altitude nester. Nest usually in holes. Egg: 6-10 white. Distribution: Kannur and also found at Purathur in the estuary of Bharathapuzha.

Order: Anseriformes

Family: Anatidae

#### 19. Species Name: Comb Duck Sarkidiornis melanotos (Pennant, 1769)

Sexual dimorphism is found clearly among these birds. Upper part of bird is metallic bluish coloured and the tail is black and wings are in a composition of black and metallic green. During flight the colouration of wings is clearly visible. Neck is white coloured but the head part is spotted with dark. Beak is flattened and it has a fleshy region in case of male and it is absent in case of female which is a special character to this bird. Ash coloured legs with webs between fingers. **Habit:** Small groups (up to 4 or 10) or large flocks of 25-30 individuals. **Habitat:** Ponds, lakes,

tanks, fresh water wetlands, reedy bunded tanks, jheels in well wooded plain countries, grazing method of feeding followed but perching on trees are also reported. **Status:** Resident. Local movements also reported. **Food:** Frogs, reptiles, fishes, aquatic organisms and aquatic plant parts. **Distribution:** Wayanad, Maranchery Kole wetlands, Trichur.

**Order: Anseriformes** 

Family: Anatidae

#### 20. Species Name: Cotton Teal Nettapus coromandelianus (Gmelin, 1789)

This bird has another name as Cotton pygmy goose. The size may be about 33-35 cm. It is the smallest bird of its kind; sexual dimorphism is distinct in the case of this bird. The male bird is metallic green coloured on its wing, patches of white and black follows it. A colour like appearance around neck is also met. The metallic colour some times becomes black. The female bird is having no colour appearance. It is duller in colour when compared to male. Metallic colour also considerably reduced. Lower parts are white for both sexes. Head has a black patch on forehead region. Immature are brown, ashy coloured. Sound is like a quacking. Habit: Single or Pairs. Small flocks (5-15 individuals), occasionally 50 individuals, 500 individuals recorded from Mysore by Phythian Adams. Habitat: All most all fresh water areas. Vegetation covered inland wetlands, tanks, such as ponds, tanks, rivers, paddy fields, wetlands, shallow areas etc. Food: All type of aquatic organisms including vegetable food. Vegetarian food includes parts of aquatic plants. Nesting: During South West monsoon ie from July to September. It use trees found near or around water bodies, and this bird is a hole nester. Eggs: 6-12 white. Distribution: Throughout Kerala and Kole wetlands.

**Order: Anseriformes** 

Family: Anatidae

#### 21. Species Name: Spotbilled duck Anas poecilorhyncha J.R. Forester 1781

As the name indicates it has colour spots on bill. The male has a real patch on the base of the flattened bill and the bill is black coloured, edge of the bill is yellowish coloured. In female red patch is absent and it is a diagnostic character. Male has black colour on back sides, white metallic greenish patch on wings. Belly part has white lines, on the black coloured feathers and leg is reddish colour. Female is having two patch of brown on head. The size may be of about 55-60 cm. Sound is similar to 'quacking' of other ducks. Mostly it is a silent one. **Habit:** Pairs or small groups.

Small flock (above 12 individuals, sometimes 40-50 individuals). **Habitat**; Vegetated fresh water ponds, reservoirs, lakes, tanks, sometime on marshy areas. **Status**: Local migratory or resident. **Food**: Similar to other ducks, mostly composed of aquatic plant parts. **Eggs**: 6-12, white composed of grey, green etc. **Distribution**: Mangalavanam, Palakkad, Kadalundi estuary, Malampuzha, Madakkara, Kole, Vembanad and Bharathapuzha.

Order: Anseriformes

Family: Anatidae

#### 22. Species Name: Northern Pintail Anas acuta Linnaeus, 1758

As the name indicates the tail of the mail bird is pointed, the female bird's tail is not pointed. The female may be confused with Gadwalls. Male has darker brownish colour during breeding season on its head, bill is flattened and the white part of the belly some what extended to neck. Slight yellow part of lower belly followed by black colour. Upper portion of body has yellow feather having black colour in centre portions. Female bird is brown coloured, yellow spotted in belly part and the eyes of female suited to body colour. But the eye of male bird is dark in colour. Sound is similar to other ducks. Habit: Pairs or small to large flocks. Habitat: Vegetated fresh water areas including ponds, tanks, lakes, rarely on marshes and salt pans, Vegetation covered inland wetlands, tanks, brackish lagoon and estuaries. Status: Migrant and local migratory. Food: Similar to other birds of its kind. Vegetation composed of plant parts. Distribution: Ambalamedu, Kattampalli, Kole wetlands and Vembanad.

Order: Anseriformes

Family: Anatidae

#### 23. Species Name: Common Teal Anas crecca Linnaeus, 1758

Male bird is composed of three colours, on the head patches of glittering metallic brown, between these patches metallic green colour is distributed and a narrow yellow line crosses around the eyes. Upper portion of body is grey and below parts is ash coloured. Tail composed of upper body colour and it attains a kind of dull white. The female having two black coloured streaks on head and rest of the body is black streaked. Upper feathers having black coloured central part and a thin yellow or brown coloured outer part. Size of this bird is of about 38-40 cm. Sound is like kirt...kirt...or gueck. Habit: Pairs or Large flocks (above thousand). Habitat: Ponds, marshes, lakes, and reservoirs, vegetation covered inland wetlands, tanks etc. Some times it is found in paddy fields also. The species visited the Kole Wetlands in the

yester years in thousands to feed on the sown paddy. Heavy poaching of these birds happened during those years. Farmers consider the species as a pest on paddy. Presently the number of visiting birds reduced. **Status:** Winter visitor. **Food:** Similar to other birds of its kind and vegetation including tender shoots. **Distribution:** Throughout Kerala and Kole wetlands.

Order: Falconiformes

Family: Accipitridae

24. Species Name: Oriental Honey Buzzard *Pernis ptilorhynchus (*Temminck, 1821)

Colouration of the body show wide variations. Usually male is darker in colour than the female. The upper part of the body is darker at the regions of neck, wings, tail etc. Usually tail contains 2-3 bands of dark colour; the final one is darker and wider. During flight, body and wings give the appearance that they are in a straight line. Below parts of this bird is light brown coloured. The legs are naked and it is yellow in colour. Sexes are alike. This bird is also known as Crested Honey Buzzard. Habit: Single or pairs. Habitat: Evergreen, semi evergreen, cultivation fields, well-wooded forests, hills, forest areas etc., Status: Resident, but show local migration. Food: Honey, larva of honey bee and wasp, insects, reptiles, amphibians, small animals and birds. Many incidents of attack of honey bees on local people were reported from the Trichur and Palghat Districts during 2009-2010, when this species attacked the honey combs on tall tress for feeding and the disturbed honey bees attacked nearby people. Nesting: February – July. Platform nester and nest is made up of sticks, twigs and softened with all possible materials. Eggs: 2, dull white, spots of red are also found. Distribution: Throughout Kerala. Chimmony Wildlife Sanctuary and Peechi- Vazhani Wildlife Sanctuary.

Order: Falconiformes

Family: Accipitridae

25. Species Name: Black – shouldered kite *Elanus caeruleus* (Desfontaines 1789)

Adult bird is ash coloured above, below parts are white coloured and a black patch on the wing. At the base of the beak there is a yellow patch. In closed condition length of wing extend over the tail. Legs are yellow and eyes are red. Immature birds are brownish in colour but the patch on the wings is distinct. During flight, under parts are white and black patch on both wings and a black line on the edge of the wings is distinct. Sound is like 'pleewit'. **Habit:** Single or pairs. **Habitat:** Scrub

areas, grasslands, cultivations wooded areas, savannah forests, scrub forests, riparian forest and semi desert areas. It is active during day time and at dusk. Lazy soaring flight is diagnostic character. Status: Resident. Food: Amphibians, reptiles, all kind of insects, small animals like rat, mice etc. Nesting: Throughout year. Small trees are more preferred. It composed of twigs, sticks, softened with all possible materials. Egg: 3-4, white with tinges of red, yellow etc Distribution: Throughout Kerala, Kole wetlands, Chimmony Wildlife Sanctuary and Peechi- Vazhani Wildlife Sanctuary.

Order: Falconiformes

Family: Accipitridae

#### 26. Species Name: Black Kite Milvus migrans (Boddaert, 1783)

It is a common bird with dark brown coloured upper body, lower parts are light coloured when compared to upper parts. Legs are yellow in colour and yellow patch on the base of the bill is also distinct. 'V' shaped mark on the tip of the tail during flight is diagnostic. The size of the bird is of about 68-70 cm, immature ones have numerous dark and brown coloured duller parts all over the body and they also have a dark patch just behind the eye. But the adult bird's eye colour suited to its body colour. Sound is like eurr—wirr,wir...wir...,laeeeee. Habit: Single, pairs and gregarious. Habit: Found close to human dwellings and habitations, cultivations, marshes, estuaries, urban localities, human habitations etc., Status: Resident. Food: Scavenging method of feeding followed and consists of mice, lizards, small animals, birds and insects. Nesting: February- March, platform nester, nest made up of twigs, sticks and all type of human domestic material's waste is used. Nest some time found in buildings, or in a large tree. Egg: 2-4 duller white having tinges of red, pink etc.

**Distribution:** Throughout Kerala.

Order: Falconiformes Family: Accipitridae

#### 27. Species Name: Brahminy Kite Haliastur indus (Boddaert, 1783)

It is a common raptor and a medium sized bird with size of about 50 cm. Upper mandible is curved downwards, at the base of the bill there is a yellow patch; the bill may be yellow to light brown coloured. Head, neck and portions of belly are white in colour. Rest of the body is brownish. Tips of the wing are black patched. Legs are yellow. Immature ones have a dull colour of adult bird; the colour of bill is black, sexes alike. Sound is like 'myeah....meeah...Habit: Found in flocks, singly and gregarious. Habitat: Ponds, all types of inland waters, common in coastal areas,

paddy fields, other cultivated areas. Mangroves are also preferred; also found in urban localities and human habitations. **Status:** Resident; also shows local migrations. **Food:** Fishes, frogs, small animals, insects, sometimes snakes, mice, garden lizards etc. **Nesting:** December – April. It uses large trees for nesting. Nest is made up of sticks and twigs. **Eggs:** 2, duller compositions of white, spots of grey or, red are also reported. **Distribution:** About 900 m. Found in Periyar Tiger Reserve and other dam sites, Reported throughout Kerala. Kole wetlands, Chimmony Wildlife Sanctuary and Peechi- Vazhani Wildlife Sanctuary.

Order: Falconiformes

Family: Accipitridae

#### 28. Species Name: Crested Serpent - Eagle Spilornis cheela (Latham, 1790)

Lower part of this bird bears bush like feathers. Head is black coloured and the bushy feathers may contain some black and white spots intermixed. Base of the bill is slightly yellow coloured. Eyes have a yellowish ring on them. Legs are yellow coloured. Tail has a white and dark band. During flight, white patch on tail and wings are diagnostic. Immature one is paler in colour composition. Sexes are alike. Sound is like kleeee...kleee...kleeeuww.... Habit: Single or pairs. Habitat: Evergreen, deciduous forest, cultivated areas, well wooded forests, wooded areas, mangroves, etc. Status: Resident and local migratory. Food: Fish, frogs, rodents, snakes, small animals. Nesting: December-March. Nest is made in the form of a platform; it is smoothened with all possible materials. Found in trees near water. Eggs: 1 dull white with tinges of yellow, red are found. Distribution: Kole wetlands, KFRI campus, Kerala Agricultural University campus, Chimmony Wildlife Sanctuary, Peechi-Vazhani Wildlife Sanctuary. Western Ghats up to 1500 m. Throughout Kerala.

Order: Falconiformes

Family: Accipitridae

#### 29. Species Name: Western Marsh-Harrier Circus aeruginosus (Linnaeus, 1758)

Size of this bird is about 55-60 cm. It has another name as 'Marsh Harrier'. Male and female shows colour differences in their distribution pattern. Male bird is brown coloured. It is slightly darker in upper body parts. Sides of the wing and tail are showing some glittering as coloured feathers. Female bird is darker in its brown colour when compared to the male. Yellow tinged legs and black nail on fingers is clearly visible. Immature birds are duller in colour when compared to adults. Habit: Single. Habitat: Fairly common, as the name indicate it is a marshy bird, but also

reported in ponds, open grasslands, paddy fields, marshes, cultivated areas, coastal banks etc., **Status:** Migrant. A winter visitor (October-April). **Food:** Animals found in marsh areas including fishes, frogs and insects. It also feed on animals like small birds and other disabled small living things. Carrion is also reported. **Nesting:** Not reported. **Distribution:** Kole wetlands and throughout Kerala.

Order: Falconiformes Family: Accipitridae

30. Species Name: Shikra Accipiter badius (Gmelin, 1788)

Male and female birds show slight variation in colour pattern. Male bird is ash coloured and white below its neck. A small patch of glittering ashy area may be found behind the eyes. Female birds show some brown colouration above. Below parts of both birds are having brown cross linings. Tail of this bird has some bands on them. Base of the bill is yellow coloured; its sound is almost similar to Drongo's sound. tthee....ttheee...like harsh sound if produced. Size may range about 35 cm. Flight method of this bird is peculiar and it follows a large number of wing strikes and a glide. Habit: Single or pairs. Habitat: It prefers to wooded areas. Open wooded forest, hills, plains, village environments, cultivation some time it may found in cultivated areas also. Evergreen forests, deciduous, scrubs etc., Status: Resident with local migration. Food: Lizards, mice, small birds, squirrels etc., Nesting: March-June, nest is made as a platform. It is composed of sticks and twigs. The nest is softened with all possible materials. Eggs: 3-4, composed of blue, white spots of Grey. Both one takes part in nesting duties. Distribution: Throughout Kerala, Kole wetlands, KFRI campus, Kerala Agricultural University Campus, Chimmony Wildlife Sanctuary, Peechi-Vazahani Wildlife Sanctuary. Usually picks the nestling of village hen when they roam the backyard of houses.

Order: Falconiformes
Family: Accipitridae

31. Species Name: Black Eagle Ictinaetus malayensis (Temminck, 1822)

As the name indicates the Eagle is black in colour. Above and below are black coloured. Tail may contain small ash tinged patches about 3 to 4 in number. Legs are feathered up to the thighs and legs are black coloured. The nails are black. Beak is heavy one, it has a yellow coloured base and other parts of beak are black. During flight, patches on lower tail and small lining at the edges of wings are clearly visible. Juvenile has duller colour and it has brown feathers on the neck. Sexes are alike.

Habit: Normally in pairs. Habitat: Deciduous forests, evergreen forests, grasslands etc. Fairly common but not abundant. Status: Resident. Food: Large insects, frogs, birds. It favours nestlings and eggs of other birds. Feed on small mammals which include mice. Nesting: November-March (South India), January-April in North India. Nest is a platform and mostly found in large trees. Eggs: 1, white in colour but spotted with red, pink etc. Distribution: Throughout forests of Kerala. Chimmony Wildlife Sanctuary, Peechi-Vazhani Wildlife Sanctuary and in Western Ghats up to 2000 m.

Order: Galliformes

Family: Phasianidae

#### 32. Species Name: Grey Francolin Francolinus pondicerianus (Gmelin, 1789)

This bird is also known as Grey partridge. It is a medium sized bird with a size of about 30-38 cm. It has chestnut colour on its upper body which has some black markings also. Below the tail, there are also some chestnut portions. Belly portion is dull white throughout all parts. There is a black line present on the sides of the neck. Some grey patches are found below beak, below eye, upper portions of head etc., sexes are almost alike but male may have spur on its legs and they are reddish coloured. Habit: Pairs, families etc., Habitat: Scrub, thorn areas, cultivated lands, open areas, grass lands, etc. It is not a common bird. Xerotypic thorn bushes, especially in the neighbourhood of villages, scattered cultivation. Status: Resident. Food: Seed, grain, termites, larva, small insects etc. Nesting: Almost throughout year. It may show some local variations. This bird is a ground nester and the nest is made up of grass and other materials. Eggs: Up to 8 dull white coloured. **Distribution:** Southern Districts, drier parts of Malabar Districts.

Order: Galliformes

Family: Phasianidae

#### 33. Species Name: Painted Bush-quail *Perdicula erythrorhyncha* (Sykes, 1832)

This bird has a red coloured beak; male has small white line from head to neck. A large white patch is found in the throat region of male. Upper body is ashy to greenish tinged brown and lower parts may be chestnut coloured and has black spots also. Legs are in same colour as that of the beaks. Female bird has black patches through the eye. Body colour is duller when compared to male. The bird's sound is like ' kirikee...kirikee....' Which is produced about 3 times continuously. Size is small about 16-18 cm. Habit: Normally parties. Habitat: Similar to jungle fowl.

Grass areas, scrubs, forest edges and forests which include evergreen moist deciduous etc. **Status:** Resident. **Food:** Grains, small insects, seeds etc., **Nesting:** Almost throughout year. But it shows local variations also. Ground nester and nest is covered with grass and it is commonly found under the scrubs. **Eggs:** 4-7, duller white but it can be distinguished from Jungle bush quail's eggs. **Distribution:** Silent Valley.

Order: Galliformes

Family: Phasianidae

#### 34. Species Name: Grey Jungle fowl Gallus sonneratii Temminck, 1813

Male and female birds show sexual dimorphism. Overall size of this bird may be about 65-70 cm for male and 30-36 cm for females. The male had a crown shaped part in his head, crown ears and related parts are reddish in colour. Female also bears such parts but they are relatively smaller. Male bird is with brownish wings; neck parts have brown spots on a black background and lower parts have white areas. Tail has some feathers which bend like a sickle, which is metallic green or black in colour. Female bird is dark brown or chocolate brown in colour. Legs are black coloured, sound is like 'kuk....ka...kura....kub...' which is heard loudly, when one passes through the forest areas. Habit: Normally in pairs or parties. Small flocks (4-5 individuals). Habitat: Forests areas which include deciduous, evergreen, secondary forests, scrubs, herbs, hill areas, bamboo forests, mixed bamboo jungle, neighbourhood of forest villages, cultivation, tea, coffee, rubber plantations and lantana bushes etc. Status: Resident. Food: Grains, seeds, termites, insects, small and soft plant parts etc. Nesting: February- May. Nest is found in the base of scrubs and is softened with dry grass and leaves. Some reports point out nest on trees. Eggs: 4-7, almost resembling common fowl. Female alone incubates. Distribution: Throughout Kerala, Western Ghats up to 200 m and foot hills about 1350 m. KFRI campus, Peechi- Vazhani Wildlife Sanctuary.

Order: Galliformes

Family: Phasianidae

#### 35. Species Name: Red Spur fowl Galloperdix spadicea (Gmelin, 1789)

As the name indicates this bird has some red colour on its, body. The leg has spurs and it may be 1-2 in female and more in the case of males. The entire colour of leg is reddish. Male has brown colour on its upper body and head has a slightly dark colour. A prominent red coloured area is found around the eyes, ash coloured parts may found just below it. Female bird has similar colour pattern but the body bears

some black mottling. The tail is dark in colour and it is well marked from the body. Sound is 'kuk...kuk...karak...' 'k-r-r-kwek'. The size may be about 35 cm. Habit: Mostly in pairs or parties. Habitat: Forests including deciduous, evergreen, scrubs areas, thorn bushes, neighbourhood of villages, scattered cultivation. Status: Resident. Food: Grains, seeds, small insects found in the soil. Nesting: Ground nester. Nest is similar to other birds of its kind, but is not softened too much. Eggs: 3-5, similar to common fowl. Distribution: Throughout Kerala. Wayanad, Palakkad gap, entire Western Ghats up to 1250 m, Kole wetlands, KFRI campus, Kerala Agricultural University campus, Chimmony Wildlife Sanctuary, Peechi-Vazhani Wildlife Sanctuary The species was recorded from the Eringole sacred grove near Perumbavur in Ernakulam District. Breeding is also recorded from this small patch of land.

Order: Galliformes Family: Phasianidae

#### 36. Species Name: Indian Peafowl Pavo cristatus Linnaeus, 1758

Average size of male is about 100-115 and of female is 80-83 cm. Male and female birds show sexual dimorphism, both of them have crest on head. Male's head and neck is blue coloured, wings have dull grey colour which is spotted of black. Brown patch also found on wings. Tail is very long, which may reach about 1.5 m in case of male bird, which is metallic green and has blue spots. Female is having a greenish colour on neck, upper body chocolate brown and lower part has white patch. Tail is not so long, legs of both are ash coloured. Both of them have white patches on head, Sound is like 'aow---auw'... National bird of India. Habit: Solitary, parties or small flocks. Habitat: Deciduous forest areas, hills, scrubs, grass lands, secondary forests, dry deciduous forest, moist deciduous forest and cultivation in close association with humans. This bird is very shy in its behaviour. Status: Resident. Food: Vegetables, plant parts, grains, seeds, snakes, small insects etc. Nesting: January-October. It is also a ground nester; nest is lined with all possible materials in an attempt to soften it. Nest is found in densely plant covered areas. Some time near to water also. Eggs: 3-5 dull white coloured. Distribution: South Western Ghats up to 1800 m. Throughout Kerala. Hills around Peermade, South Travancore, Peechi-Vazhani Wildlife Sanctuary, Parambikulam Wildlife Sanctuary, Vadakkathara, Kodumbu, Vandithavalam (located in Palakkad District, Chittur Taluk), Kole wetlands, KFRI campus. A new bird sanctuary is declared namely the "Choolannur

Peafowl Sanctuary" near Thiruvalla Mala in Palghat District for the conservation of the species.

Order: Gruiformes

Family: Rallidae

37. Species Name: White-breasted water hen Amaurornis phoenicurus (Pennant, 1769)

As the name indicates the breast part is white, upper parts including head, neck are dark coloured or black in colour. Tail is slightly upright and at the base it has a slight reddish area. Eyes are black and the bill is long and pointed. It has a very faint yellow touch, but on the base it is red. The legs are long which make the bird a taller one and the toes are long and the entire leg colour is brown mixed with to faint red. Sound is like 'krrrr......kweak.....kuok......kook' etc. common in the Kole Wetlands during monsoon. Large scale poaching occurred in yester years. Detailed study on the ecology of this species carried out from southern Kerala. The status is in least concern (LC). Crepuscular in activity and make loud calls during the monsoon season. Habit: Single or pairs. Habitat: Ponds, ditches, marshy areas, swamps, cultivated areas, paddy fields, road side ditches, drainage systems. It is not common due to its shy nature. Status: Resident. Food: Fishes, molluscs, snails, insects, earthworms, other small larva etc., Nesting: During rainy season, i.e. June –October. Nest is made up of plants found in water, twigs etc. Noisy during breeding season. Eggs: 6-7 dull white, spots of red is reported. Distribution: Entire South Western India up to 2000 m. Throughout wetlands of Kerala. Kole wetlands, Chimmony Wildlife Sanctuary and Peechi- Vazhani Wildlife Sanctuary.

Order: Gruiformes

Family: Rallidae

38. Species Name: Watercock Gallicrex cinerea (Gmelin, 1789)

Sexual dimorphism is shown during breeding season; otherwise male and female are slight brown on lower and dark brown on upper parts. Usually male bird is slightly darker than the female bird. During breeding season male bird is dark black colour on all parts. Beak is yellow coloured at the base and there is a reddish coloured crown. The eyes and legs are reddish in colour. This bird has a size of about 30 cm. Legs are tall and toes are also long and the tail is slightly upright. Habit: Single or pairs. Habitat: This bird is crepuscular in its nature, mostly found during dawn and dusk. Marsh areas, aquatic plants, swamps, marshlands, inundated paddy fields, rain filled

ponds, roadside ditches, village tanks and cultivated areas. **Status:** Resident. Local movements are common. **Food:** It feed on smooth and soft plant parts, seeds, snail, molluscs, fish etc. **Nesting:** June- September. Nest made up of aquatic plants and it is found in flooded areas and also in aquatic bush vegetation. **Eggs:** 3-8, not white and it may be pinkish to reddish in colour and spots may present. **Distribution:** South Western India, throughout Kerala, Kole wetlands and Peechi- Vazhani Wildlife Sanctuary. The IUCN status is in least concern (LC) and not many studies carried out on the species.

Order: Gruiformes

Family: Rallidae

#### 39. Species Name: Common Moorhen Gallinula chloropus (Linnaeus, 1758)

During swimming this bird resembles duck, but it is a tall rail. Upper and lower part of the body is blackish or greyish, the grey colour is prominent at the tail parts. White colours can be seen along the border of wings, sometime it may have slight red spots also, under part of tail is also white. Bill is greenish colour but the legs are tall greenish coloured. Red marking is reported at the base of legs. Sound is like 'kirrik...krek...krek...kek...kek...kak;;'sexes alike. Habit: Normally in pairs. Habitat: Normally found along the aquatic vegetation, marshlands, inundated paddy fields, rain filled ponds, roadside ditches, village tanks, wetlands, marshy areas etc. Status: Resident. Food: Similar to water hens. Nesting: June-September. Nest made up-of aquatic vegetation materials and found on the base of marshy vegetation. Eggs: 5-12, faint yellow coloured. Distribution: Throughout Kerala, 2000 m in Nilgris and Kole wetlands. The status is in least concern (LC). Many studies carried out on the Sub species in other countries.

Order: Gruiformes

Family: Rallidae

#### 40. Species Name: Common Coot Fulica atra Linnaeus, 1758

This bird resembles duck during swimming. Frontal area and bill is white, eyes attain a reddish colour. Upper and lower parts of the body is dark black, tail is not well demarcated from the body. Sexes alike. Legs some times attain an ashy colour. It is a gregarious bird. In flight mode, position of legs, wings are distinguishable from duck. The toes are lobed. **Habit:** Single or pairs. **Habitat:** Found associated with water logged area, ponds, marshlands, inundated paddy fields, village tanks, marshes, tanks, estuaries etc., **Status:** vagrant, local migratory. **Food:** Smooth and soft parts of

aquatic plants and cultivated plants, molluscs, snail, fish, insects etc. **Nesting:** July-August. Nest is found in floating vegetation and it is made up of vegetation **Eggs:** 6-10, stone colour, red spots are also reported. **Distribution:** Throughout Kerala. South Western India, Kole wetlands and Peechi- Vazhani Wildlife Sanctuary.

Order: Charadriiformes

Family: Jacanidae

### 41. Species Name: Pheasant-tailed Jacana *Hydrophasianus chirurgus* (Scopoli, 1786)

Smaller than Whitebreasted waterhen. During breeding season the tail of the bird lengthens and it attains a chocolate colour. Wings have white patch on it, the throat, lower neck, chin also white in colour. Upper portions of neck are yellow coloured and eyes are darker. Legs are ashy coloured and the toes are very long. But in non-breeding plumage the bird maintain the similar colour pattern, but the beak is yellowish and brown colour is reduced in upper areas. Sound is like tewn....tewn....;ki...ki...;me....oophi'kyoo...kyoo. Sexes alike. The length of the toes is for balancing on the floating vegetation. Habit: Single or pairs. Habitat: It is found in all water logged areas, floating vegetation covered ponds, lakes and tanks holding a plenty of floating vegetation. It prefers water lilies and is reported in paddy fields. Status: Resident, with local movements. Food: It feeds on aquatic vegetative matter and also on insects, molluscs, fishes, snails etc. Nesting: June-September. Nest made up of long floating reeds of aquatic vegetation. Partially submerged is preferred. Some reports point out that, it laid eggs on leaves of plants directly. Eggs: 4, slight greenish, brown colour. Distribution: Throughout the wetlands of Kerala.

Order: Charadriiformes

Family: Jacanidae

#### 42. Species Name: Bronze-winged Jacana Metopidius indicus (Latham, 1790)

As the name indicates, the wings of this bird are bronze coloured. Head is black coloured and has a narrow white stripe, which is extending towards the back side of head. Eyes are dark coloured, beak is slightly yellow coloured and at the base of it has a small red area. The glossiness of metallic bronze colour is a distinguishable character of this bird. Tail is very short and legs are taller and the toes are very long. This type of leg is an adaptation to its habitat. Tail portion may attain a dark brown colour. Breast and lower areas are metallic greenish, but it meets dark brown colouration of lower portion. Immature may be confused with water cock's female.

Habit: Single or pairs. Habitat: Mostly found in vegetation covered and water logged areas, floating vegetation covered ponds, lakes and tanks. Status: Resident. Food: Aquatic plant parts, insects, molluscs etc. Nesting: June- September. Nest is made up of aquatic vegetation, usually leaves, stems and mostly in a form of pad. It may be found among marginal water vegetation. Eggs: 3-4 bronze coloured.

**Distribution:** Throughout the wetlands of Kerala.

Order: Charadriiformes

Family: Haematopodidae

### 43. Species Name: Eurasian Oystercatcher *Haematopus ostralegus* Linnaeus, 1758

As the name indicates these bird feeds on oysters, molluscs and other shelled organisms. Colour composition of this bird consists only of black and white colours. Head, neck, upper areas bear black colour. Lower parts are white coloured which includes lower throat, chest, lower tail coverts etc. Legs and bill are reddish coloured and the bill is long and it is slightly bulged at its ends which is an adaptation for its mode of feeding. Eyes are reddish and have a black area at its central part; chin and lower head are black. During flight, white patch on its tail and upper wings are diagnostic. White collar is developed during season. Sound is like double whistling type and high pitched. Habit: Pairs or parties, small flocks. Habitat: Beaches, sandy areas, rocky shores, tidal estuaries. Normally it is a shore bird. Status: Winter visitor.

Food: Oysters, mussels, snails, crabs, small worms and other such shelled organisms.

Distribution: Kole wetlands, Kadalundi.

Order: Charadriiformes

Family: Charadriidae

# 44. Species Name: Yellow-wattled Lapwing Vanellus malabaricus (Boddaert, 1783)

Tall bird with a size of about 27 cm. General body colour sandy brownish. Upper body, chin, throat and upper chest areas are sandy brown coloured. Lower belly, up to a portion of chest is white coloured. A prominent thinner dark line is present in the upper chest, demarcating sandy grey and white colours. Head is black coloured and having small white line around it, beak and tail is black, but latter having prominent white patches between beak and head there is a fleshy yellow area. Legs attain yellow colour and it is long. During flight white patch on wing, tail is diagnostic. Habit: Pairs or parties. Habitat: Mostly found in dry areas, open country lands, scrub,

grasslands, dried cultivated lands, scrub, grasslands, waste lands, jheels, tanks, rivers and ditches. **Status:** Resident with local movements. **Food:** Small insects and such organisms found in dry areas. **Nesting:** April-June, nest is made in bare land and it is surrounded by small stones. **Eggs:** 4, olive but brown spots are common. **Distribution:** Throughout Kerala. Kole wetlands, Kerala Agricultural University campus.

Order: Charadriiformes

Family: Charadriidae

#### 45. Species Name: Red-wattled Lapwing Vanellus indicus (Boddaert, 1783)

A typical plover bird with a size of about 31-33 cm. A tall bird, having long yellow coloured legs. Head has black area, below parts including chin, throat, some parts of chest is blackish and tail portion also has some dark patches. Upper body colour is brownish coloured and lower portion is white coloured. Eyes are black, but a reddish line is found along it and beak is reddish coloured but its tips are black. Sound is a diagnostic character to this bird which is like 'Di-he-do-it'. Black patch on tail is diagnostic. Habit: Pairs. Mostly found distributed in a scattered form, occasionally small flocks. Habitat: Open lands, cultivated and ploughed lands, salt marshes, beds of river and lakes, grass lands, jheels, tanks, rivers, and ditches etc. Status: Resident. Food: Insects, snails, molluscs etc., Nesting: March-August. Nest made in bare lands covered with small stones. Eggs: 4, stone coloured. Distribution: Throughout Kerala. Kole wetlands, KFRI campus, Kerala Agricultural University campus and Chimmony Wildlife Sanctuary.

Order: Charadriiformes

Family: Laridae

#### 46. Species Name: Brown-headed Gull Larus brunnicephalus Jerdon, 1840

A medium sized bird with a size range about 42-46 cm. During non breeding season and in immature stage, the brown nature of head can be easily identified. Small dark patch may be found below eyes, upper body is ashy coloured and tail is white. During breeding plumage head is chocolate brown and eyes, legs are reddish coloured. During flight end of the wings have black tips. Immature ones are greenish yellow coloured. Sound is like kraa....kurrr....kurrr Habit: Gregarious bird, small to large flocks. Habitat: Inland and marine water areas, seacoast, backwaters, tidal creeks, but occasionally on river and streams. Status: Winter visitor. Food: Soft and

smooth plant parts, insects and other small organisms. Nesting: June-July, nearest

breeding place is Ladakh, Tibet. **Distribution:** Throughout Kerala and Kole wetlands.

Order: Charadriiformes

Family: Laridae

47. Species Name: Black-headed Gull Larus ridibundus Linnaeus, 1766

This bird is closely similar to brown headed gull, but it can be distinguished from

its colour pattern on its wings. During non breeding season, adult bird is similar to

brown headed gull but a large band of black below the eyes and lack of black

colouration at edges of wings, slight appearance of black colour on edges of wings

etc. Bill, legs, tail are similar to brown headed gull. Immature bird has small dark area

below eyes and lack of brown feathers on neck is diagnostic. Sound is like

kree...ah...ka...yok etc... sexes alike. Habit: Gregarious bird. Small to large flocks.

Habitat: Marine areas such as seacoast, backwaters, tidal creeks. Status: Winter

visitor. Food: Similar to Brownheaded gull. Nesting: Extralimital. Distribution:

Throughout Kerala and Kole wetlands.

Order: Charadriiformes

Family: Laridae

48. Species Name: Caspian Tern Sterna caspia Pallas, 1770

Largest tern with a size range about 50-51 cm, it is a colonial nester and upper

body of non breeding adults is grey coloured and head and nearby portions are white.

Lower portion is completely white. During breeding season, a dark black patch is

developed on the head and it gives the appearance of a black crown. Eyes, legs, feet

and toes are black coloured. The bill has prominent red colour from its base to tip but

at the ends it is black coloured. The colour of legs and beak is diagnostic during flight.

Sexes are alike, the sound is like a harsh kuowu...kuowu.. etc. Habit: Twos, threes

or parties mixed with other birds. Habitat: Marine and inland waters, but it is very

rarely reported in inland water bodies. It is reported in marine habitat such as

seacoast, backwaters, tidal creeks, inland wetlands. Status: Winter visitor. Food:

Crabs, snalls, molluscs, fish etc. **Nesting:** May-June, ground nester, the nest may very

rarely covered with other materials. Eggs: 2-3, Greyish yellow coloured.

Distribution: Kole wetlands.

Order: Charadriiformes

Family: Laridae

49. Species Name: River Tern Sterna aurantia J.E.Gray, 1831

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Size of this bird is of about 40-46 cm. Upper potions of the body of this bird is white grey coloured or dull white coloured, lower portion is white. During breeding season black colour is increased at head regions. Legs are yellow coloured; the bill is glittering yellow coloured. The tail is deeply forked and the wings are sharp ended. Sexes alike, sound is like kiuk.....kieer....wick, this bird is a colonial nester. Habit: Gregarious. Small to large flocks. Habitat: Ponds, rivers, reservoirs, backwaters, tidal creeks, inland wetlands, sometimes it may be found in estuaries. Status: Resident. Food: Fishes, tad poles, crustaceans, crabs and small insects found in water. Nesting: March-May. It is a ground nester, nest may found around its habitats. Eggs: 3, a composition of green, spots of red also reported. Distribution: Throughout Kerala. Kole wetlands.

Order: Charadriiformes

Family: Laridae

#### 50. Species Name: Large Crested Tern Sterna bergii Lichtenstein, 1823

This bird is also known as Great Crested Tern, with a size of about 50-53 cm. Upper part of the body is grey white and this can be visible at the wings. Upper neck is white, head has a black crest. Lower portions are completely white. During breeding season black colour of head region is prominent. Immature birds have a slight brownish mottling all over the body. Sexes are alike and this bird is a colonial nester. Sound is like chirruk...chirruk..... Bill is yellow coloured, the legs and eyes are black. Habit: Single or small flocks. Habitat: Seas, beach areas, mostly found close to shore, it is also found in offshore waters. Status: Winter visitor. Food: Fishes, snails, crabs etc. Nesting: April-June. It is a ground nester, nest found in and around its habitat. Eggs: 1-2, dull white coloured, sometime slight brownish colour also developed. Distribution: Throughout Kerala.

Order: Charadriiformes

Family: Laridae

#### 51. Species Name: Common Tern Sterna hirundo Linnaeus, 1758

This bird is having a size of about 34-36 cm. Upper body is grey coloured, head having a prominent black feathers during breeding season. Forehead, neck is black, tail is forked and it is not projected, while the bird is at rest. Beak is rose or reddish coloured at basal portions and its tip is black, legs are also reddish. Eyes are black, lower portions of this bird is white. Immature ones having small white portions at the forehead regions. Sound is like kirii....kek...kek.... It may sometime confuse with

Roseate tern. It is a colonial nester. **Habit:** Solitary or flocks. **Habitat:** Ponds, rivers, estuaries, seacoast, backwaters, tidal creeks, inland wetlands, tidal areas. **Status:** Winter visitor. **Food:** Small organisms, fish, snails. **Nesting:** June-July, ground nester, nest made in soil, sometimes smoothened with possible materials. **Eggs:** 2-3, composition of green and yellow. **Distribution:** Throughout the wetlands of Kerala. Kole wetlands, Peechi- Vazhani Wildlife Sanctuary.

Order: Charadriiformes

Family: Laridae

#### 52. Species Name: Little Tern Sterna albifrons Pallas, 1764

As the name indicates its size may range about 23-24 cm. It is a small bird when compared to other term, so that it can be easily identified from other terns. Head is black and it contains a small white patch, upper body is grey above. Lower portion is completely white and bill is blackish. But during summer head become black bill and legs are turned to yellow. Eyes of this bird are dark black. Sexes alike and sound is like krik...creek etc.. Habit: Solitary, sometime small flocks. Habitat: Ponds, rivers, tidal creek, lagoon, estuaries etc. Reported from both inland and marine waters. Status: Winter visitor. Food: Small organisms including insects, fish, snails, crabs, molluses etc. Nesting: May-June, it is a ground nester, nest usually a simple one. Eggs: 2-3, both sex take part in incubation duties, egg is yellowish green. Distribution: Kole wetlands, Thrissur and other coastal parts.

Order: Charadriiformes

Family: Laridae

#### 53. Species Name: Black-bellied Tern Sterna acuticauda J.E.Gray, 1831

This bird is confused with whiskered tern and river tern. But it can be identified due to its size which is of about 33 cm. In adult birds during breeding season, upper body is grey coloured, head is dark black, lower portions including the chin, throat are white. As the name indicates the lower portions is black coloured. The legs are webbed and it is reddish coloured. During non breeding season, dark black patch is seen behind the eye and black colour of head reduced and lower portion are dull white. Sound is like kit...ke..ker...kewite...ke etc.. Tail of this bird is deeply forked. Habit: Small or large flocks. Habitat: Ponds, rivers, inland water bodies, sea coast, backwaters, tidal creeks, inland wetlands. Status: Resident. Food: Fishes. Nesting: March-April. Nest may mix with other colonial nesters. It is a ground nester and it is

simple. Eggs: 3 sand coloured. Both parents share parental duties and incubate.

Distribution: Throughout the wetlands of Kerala and Kole wetlands of Thrissur.

Order: Charadriiformes

Family: Laridae

#### 54. Species Name: Whiskered Tern Chlidonias hybrida (Pallas, 1811)

This bird is with a size of about 25 cm and it is similar to River tern, but due to its character it can be distinguished from former. During breeding season, upper portion of this bird is grey coloured and head has black cap. Lower areas like chin and throat has dull white colours, rest of the lower portions is dark grey coloured. While the bird is at rest the closed wings project beyond tail. Tail is forked; the wing tips are sharply ended. During non breeding season, black colour of head is reduced and dark patch found below the eyes. Bill is red at the base and black at its tip and foot is webbed and it is reddish. Sound is like harshy kreak, kreak... sexes alike. Habit: Single or small flocks. Habitat: Ponds, muddy tidal areas, marshy lands, sea coast, backwaters, inland wetlands. Status: Winter visitor. Food: Small insects, fishes, crabs, snails, molluscs etc. Nesting: June- September, colonial nester. Nest made up of aquatic vegetation. Eggs: 2-3, greenish brown. Nesting not recorded in Kerala. Both parents take part in all duties. Distribution: Throughout Kerala. The bird is common in Kole Wetlands of Thrissur, usually seen perched on electric lines.

Order: Columbiformes

Family: Columbidae

#### 55. Species Name: Blue Rock Pigeon Columba livia Gmelin, 1789

This is a common bird with a size of about 32-33 cm. It is mostly found along with human habitations. Head of this bird is ash coloured, upper neck area having some metallic green tinges, lower neck is having purplish glittering colour. Upper body is ash coloured, while the bird is at rest, the wings have two black bands. End of the wings are having slightly dark areas, the tail is ash coloured but have dark black band at its tip. Legs are reddish coloured and having black nails at the tips. Base of the bill has a white area; eyes are reddish, but a black spot at its centre. Sound is like gootroo...goo....goo...ooo... Habit: Small to large flocks. Habitat: Rocky areas, human dwellings and near by habitats. It is mostly seen while sitting on the telephone cables, rock cliffs, old vestiges, ancient forts, factory and warehouse sheds, residential and public buildings, temples and railway stations. Status: Resident (but some amount of local migration reported by Salim Ali). Food: Grains, cereals, nuts, pulses, ground

nuts etc. **Nesting:** Almost throughout year. Its nest is found in the holes of wells, buildings and cliffs. It is covered with all type of waste materials. **Eggs:** 2, white colour, but not a regular round shape. Both ones share all duties. **Distribution:** Throughout Kerala. Kole wetlands, Chimmony Wildlife Sanctuary and Peechi-Vazhani Wildlife Sanctuary.

Order: Columbiformes

Family: Columbidae

56. Species Name: Nilgiri wood - Pigeon Columba elphinstonii (Sykes, 1833)

This bird has a size of about 40-42 cm. It is mostly found in forests and head of this bird is ash coloured, upper neck portion has small white and black areas intermixed together; below which is reddish or purplish colour is found. Upper body portions are dark grey coloured, but it becomes dark to black on the tail parts. Lower portion is completely ash coloured. Sexes are alike, sound is like who...who...who.. type. Habit: Single or small flocks. Habitat: Evergreen, moist deciduous, shola forests, secondary forests, etc. Status: Resident. Food: Fruits and berries etc. Nesting: April-June, similar to pigeons, nest made in medium sized trees. Eggs: 1, white. Distribution: Forests of Kerala mostly above 900 m. Detailed studies on its ecology and behaviour carried out. Status is in Vulnerable. Somasundaram and Vijayan (2010) have done detailed studies.

Order: Columbiformes

Family: Columbidae

57. Species Name: Oriental Turtle-Dove Streptopelia orientalis (Latham, 1790)

This bird is also known as Rufous turtle dove, due to the rufous colouration. Size of this bird may range about 30-33 cm. Head portion is slightly grey coloured, but reddish colour is prominent all over the body. Upper portion of the wings having black and reddish grey areas, which gives the appearance of a chess board. Leg's colour is synchronized with body colours, eyes having a reddish area and in the centre it is black. Tail is grey to dull black coloured, but it is having white area at the tips, moreover the tail is round shaped. Sound is like gous...gur...guo...etc. Sexes are alike. Habit: Single, pairs or small parties. Habitat: Evergreen forests, cultivated areas, mixed deciduous forest, bamboo forest and reported in open forests. Status: Winter visitor. Food: Grains, seeds, etc. Nesting: May-July, nest is similar to other pigeons but it is found in its habitat. Eggs: 2, whitish, both share all duties. Distribution: Wayanad, Parambikulam and Peechi-Vazhani Wildlife Sanctuaries.

**Order: Columbiformes** 

Family: Columbidae

58. Species Name: Spotted Dove Streptopelia chinensis (Scopoli, 1786)

This bird has a size of about 30 cm. Head, neck, chin, throat are slight reddish or pinkish colour. Upper body is dark grey coloured, wings having ashy colour, while the bird is at rest. There is a white black colour intermixed chess board like appearance at the neck regions. Lower portions like tail coverts, lower belly are white coloured. The tail is some what long, when compared to other pigeons and it has white tips at end. Legs are reddish coloured, the eyes are vellow coloured and having a black at its centre. Sexes are alike, sound is like a mourning like kro...kro...kro etc.. Habit: Single or pairs even small flocks. Habitat: Evergreen, deciduous, forests, cultivated lands, sometimes find close to human habitats, gardens, groves. Status: resident. Food: Grains, seeds etc. Nesting: Throughout the year. Nest is similar to pigeons, sometimes found close to human habitations. Eggs: 2, white both parents share all duties. Distribution: Wayanad, Parambikulam and Peechi- Vazhani Wildlife Sanctuaries, Kole wetlands and KFRI campus.

Order: Columbiformes

Family: Columbidae

59. Species Name: Eurasian Collared Dove Streptopelia decaocta (Frivaldszky, 1838)

This bird is also known as ring dove, the size may range about 30-32 cm. Head, upper neck, chin, throat, chest and other lower portions are completely ash coloured. There is a black ring at the upper neck, upper body is light green mixed brown coloured, but the brown colouration is more prominent. Wing tips having black patches while the bird at rest. Tail is grey coloured, legs are reddish coloured, eyes are dark coloured. Sexes are alike, sound is like kukooo...koon... kooon etc. Habit: Pairs or small flocks. Habitat: Open areas, cultivated lands, scrubs, deciduous forests. Found along human habitations, gardens, groves. Status: Resident. Food: Grains, seed etc... Nesting: Throughout the year, nest similar to other pigeons and it is made in trees. Eggs: 2, white both share all duties. Distribution: Mostly drier areas.

Order: Columbiformes

Family: Columbidae

60. Species Name: Emerald Dove Chalcophaps indica (Linnaeus, 1758)

This bird has a size of about 27 cm. Head portion has white colours, but just behind it, is grey coloured feathers. Chin is dull white, but throat and rest of breast are chestnut coloured. Upper wings green coloured, having small white thin line at starting point of wings. Tail and tip of wings having dull black colours, lower belly is grey coloured, eyes are black, legs and beak having small reddish coloured. Sexes are alike, sound is like hoon...hoon... Habit: Solitary or pairs. Habitat: Evergreen, deciduous forests, moist deciduous forests, hilly areas etc. Status: Resident. Food: Grains and seeds. It is a ground feeder. Nesting: January-May, similar to the nest of pigeons found in bamboo jungles. Local variations reported. Eggs: 2 dull white. Distribution: Throughout Kerala. KFRI campus, Kerala Agricultural University campus.

Order: Columbiformes

Family: Columbidae

61. Species Name: Yellow-legged Green- Pigeon Treron phoenicoptera (Latham, 1790)

This bird is also known as Yellow footed Green pigeon, common green pigeon etc. Having a size of about 30-33 cm, head is grey coloured, but this grey colour appears to be mixed with blue; similar colour is found in the tail and eyes. Upper neck and lower breast, chin is having a yellow colour. Starting from the wing, having grey or chestnut colour, but lower portions are in yellow lines and dark grey colour. As the name indicates, the leg is yellow coloured and it is a diagnostic character to this bird. Beak is in similar colour with that of head. Sound is like a whistle. Habits: Gregarious, mostly found in flocks (5-10 individuals). Habitat: Always found in trees which may be in deciduous or open forest. Sometimes met with banyan trees (when the fruits are ripened). Dry deciduous forest, moist deciduous forest with a scattering of Ficus. Status: Resident. Food: Fruits and other berries. Nesting: March - June, nest is similar to other pigeons. Egg: 2, white both share domestic duties. Distribution: Throughout Kerala. KFRI campus, Chimmony Wildlife Sanctuary and Peechi- Vazhani Wildlife Sanctuary.

Order: Columbiformes

Family: Columbidae

62. Species Name: Green Imperial-Pigeon Ducula aenea (Linnaeus, 1766)

This bird has a size of about 40 cm. Head, upper neck, belly portions are grey coloured. Throat area having yellowish white colours, upper wings having metallic

green colours, which is a diagnostic character of this bird. Upper tail and wing tips having a grey coloured appearance, but it has slight metallic green colour. Lower tail covert is chestnut coloured, chin is also a diagnostic character to this bird, Legs and eyes are reddish, beak is in similar colour that of head. Sound is like wook...woor.... Sexes are alike. Habit: Solitary or Pairs. Sometime small flocks. Habitat: Mostly found in trees. It is reported from deciduous, moist forests, scattering of large ficus and other wild fruit trees. Status: Resident. Food: Fruits. Nesting: April-May. Nest similar to pigeons. Eggs: 1, white both sexes involve nesting duties. Distribution: Throughout Kerala. Chimmony Wildlife Sanctuary and Peechi- Vazhani Wildlife Sanctuary.

**Order: Columbiformes** 

Family: Columbidae

#### 63. Species Name: Mountain Imperial Pigeon Ducula badia (Raffles, 1822)

It is a large bird with a size ranging from about 43 to 50 cm. Head is grey, chin has white patch, neck area ashy, mixed brownish colour and the lower portion is completely ashy mixed brown. Upper body is having brownish colours, while the bird is at rest the wings having black areas, tail having a dark black patch and a light area after this patch. Legs are reddish, eyes similar colour that of head, but having a red ring around it. Base of the beak having reddish colour, but beak is in the colour of chin. Sexes alike, sound is like ul...oo groo...goo... when at a distance it seems to be like a crow. **Habit:** Pairs or flocks. **Habitat:** Mostly seen when it is flying, evergreen and mountain forests, Ghats, scattering of large ficus and other wild fruit trees. **Status:** Resident. **Food:** Fruits. **Nesting:** January-July. Similar to pigeons. **Sometimes** hidden by leaves. **Egg:** 1 white both incubates. **Distribution:** Throughout Kerala. Chimmony Wildlife Sanctuary.

Order: Psittaciformes

Family: Psittacidae

#### 64. Species Name: Indian Hanging Parrot Loriculus vernalis (Sparrman, 1787)

This bird is also known as Vernal hanging parrot or Indian lorikeet with a size of about 14 cm. Head, upper body and lower portions are green coloured. While the bird is at rest, tail protruded and a part of rump is reddish coloured. Legs are yellowish with mixed red coloured. Beak is reddish; the upper mandible is down curved. The chin portion has slight blackish patches. Eyes are yellowish ringed and having black at its centre. Sound is like che...che...chi...chi.. chee etc. Female bird has no

blue colours and the bill is down curved. Rapid wing strokes and a pause method of flight followed. Habit: Pairs. Habitat: Mostly found close to trees. Reported in deciduous, moist deciduous, evergreen forest and wooded areas, orchards etc. Status: Resident. Food: Fruits, nectar, pulp etc. Nesting: Mostly use natural holes in trees. Rarely does it make holes. Eggs: 3, white not smooth round. Distribution: Throughout Kerala. KFRI campus, Chimmony Wildlife Sanctuary and Peechi-Vazhani Wildlife Sanctuary.

Order: Pslttaciformes

Family: Psittacidae

#### 65. Species Name: Alexandrine parakeet *Psittacula eupatria* (Linnaeus, 1766)

This bird has a size of about 50-53 cm and it is distinguishable from other parakeets due to its large size. The whole body is green coloured, but in male, neck portion having a rose coloured ring at upper and black coloured one at lower portion. This pattern of colouration is not found among females. The tail is long and it is having a considerable bluish colour and the legs are ashy coloured. Reddish patch is present on the shoulders. The bill is deeply curved downwards and it is big, when compared to other parakeets. It is also known as Great Indian parakeet and destructive bird to crops. Sound is like keeak...kreek...arr. Habit: Mostly in flocks. Habitat: Cultivated lands, orchards, wooded areas, deciduous, moist forests, mangroves, plantations etc. Status: Resident. Food: Standing crops and fruits. Nesting: Not reported in Kerala. Eggs: 2-4 white not smooth round. Both share all duties. Distribution: 900 m in Western Ghats, once common in Kerala but now it is decreased. Reported in Wayanad.

Order: Psittaciformes

Family: Psittacidae

#### 66. Species Name: Rose-ringed Parakeet Psittacula krameri (Scopoli, 1786)

This bird is similar to Alexandrine Parakeet with a size of about 40-42 cm. As in Alexandrine Parakeet, the female bird lacks rose and black rings. While the bird is at rest, the black colouration on tip of wings is clearly visible, but it is a very small patch when compared to Alexandrine Parakeet. There is no reddish colouration on the shoulders. Bill is sharply curved, the lower mandible having black colouration. Head portion having small black line which extend to eyes. Sound is like keew..Keoow...It follows rapid wing storks and direct flight method is followed. It is a common pet bird and is destructive to fruits; Habit: Seen in large flocks. Habitat: Parks, gardens,

orchards, wooded areas, cultivated standing crops, open forests, estuarine areas, moist deciduous, dry deciduous, lightly wooded country, cultivation in the neighbourhood of human habitations. Status: Resident. Food: Fruits and crops etc. Nesting: February - April, local variations reported. Nest is a natural hollow in tree trunk, buildings etc. Eggs: 4-6 white, not smooth rounded. Both parents share all duties. Distribution: Resident. Kole wetlands, KFRI campus, Kerala Agricultural University campus, Chimmony Wildlife Sanctuary, Peechi- Vazhani Wildlife Sanctuary. IUCN status is in Least Concern (LC).

Order: Psittaciformes

Family: Psittacidae

# 67. Species Name: Plum-headed Parakeet Psittacula cyanocephala (Linnaeus, 1766)

This bird is also known as Blossom headed parakeet, with size smaller that of Rose ringed parakeet, with ranges about 34 cm. As the name indicates, head of the male bird is red coloured and that of female is grey coloured and having ring of yellow on neck. Lack of shoulder patch is another diagnostic character. Beak may have yellow colour, legs are ashy coloured, tail is very long and bluish colour on them is clearly visible. Lower side of head of male have some amount of black. Sound is like yeet...isyeet..wink...tooi...tuee...Bill is down curve. Habit: Mostly flocks. (5-10 individuals). Habitats: Wooded areas, cultivated lands in close range of forest, orchards, coastal vegetation, evergreen, moist deciduous, dry deciduous, lightly wooded country, cultivation in the neighbourhood of human habitations. Status: Resident. Food: Fruits. Nesting: Sometime make holes on trees, or use natural holes. January-May, colony of nest also reported. Eggs: 4-6 white, not smooth rounded, both parents share all duties. Distribution: Throughout Kerala. Kole wetlands, KFRI campus, Kerala Agricultural University campus, Chimmony Wildlife Sanctuary and Peechi- Vazhani Wildlife Sanctuary.

Order: Psittaciformes

Family: Psittacidae

# 68. Species Name: Blue-winged Parakeet Psittacula columboides (Vigors, 1830)

This bird is also known as Malabar parakeet and size is about 38 cm. As the name indicates, it's wing areas are blue coloured, but patches of green can be seen around eyes, lower tail coverts and lower neck parts. The male have black ring round neck and the female bird lacks it. Beak is reddish coloured, legs are ashy coloured, the tail

having prominent bluish tinge and yellow mixed tip and the bill is down curved. Upper wing have small tinges of yellowish colour. Sound is like scree,...screet... a harsh one. Mandible may have grey colour also. Habit: Flocks. Habitat: Trees and jungles, deciduous, evergreen forests, scrubs, estuarine areas, cultivated area etc. Status: Resident. Endemic and show some local movements. Food: Grains, fruits, flowers etc.. Nesting: It uses other bird's nest. January-March. Eggs: 4, white and round. Distribution: Throughout Kerala. KFRI campus, Chimmony Wildlife Sanctuary and Peechi- Vazhani Wildlife Sanctuary.

Order: Cuculiformes

Family: Cuculidae

# 69. Species Name: Pied Crested Cuckoo Clamator jacobinus (Boddaert, 1783)

This bird is having a size of about 32-33 cm. The crested nature is a diagnostic character to this bird; it is also known as pied cuckoo. Upper body is completely black coloured, but wings have a brownish colour and white patches. Lower portions of the body are completely white coloured. The tail is long and having white stripes at its sides, lower coverts of tail is white. Beak is black and it is down curved and legs are also same colour. Eyes are similar in colour, when compared with head portions. Sound is like pee...pee...piu... Habit: Single or Pairs. Habitat: Deciduous forests, cultivated lands, scrubs, gardens, well wooded forest, groves, stunted jungle in semi desert. Status: Resident, showing considerable local movements. Food: Grass hoppers, caterpillars etc. Nesting: June- August (not confirmed). It is a nest parasitic bird on babblers. Eggs: Blue coloured. Distribution: Throughout Kerala. Chimmony Wildlife Sanctuary and Peechi- Vazhani Wildlife Sanctuary.

Order: Cuculiformes

Family: Cuculidae

# 70. Species Name: Redwinged Crested Cuckoo Clamator coromandus (Linnaeus, 1766)

This bird may have a size range from about 45 to 47 cm. It is also known as Chest nut winged cuckoo. Head has a crest and it's blue coloured neck has a white band below and has a glittering black colour on upper body. The wings are red or chestnut coloured. Lower portion including chin, throat have brownish red colour followed by a white portion and then ashy colour is found. The tail has ashy feathers at the base and then it becomes bluish coloured. Beak is black and curved. Legs are ashy; eyes have a reddish yellow colour. Sound is like klinck,..breep..peep....etc. Habit:

Solitary or Pairs. **Habitat:** Deciduous, evergreen forests, wooded areas, scrubs, and mostly found in trees. **Status:** Winter visitor. **Food:** Caterpillars, larvae etc. **Nesting:** April-August. Parasitic on other birds mostly Laughing thrushes. **Eggs:** No records.

Distribution: Silent Valley, Periyar.

Order: Cuculiformes

Family: Cuculidae

71. Species Name: Brainfever Bird (Common Hawk Cuckoo) *Hierococcyx varius* (Vahl, 1797)

This bird is some what similar to Shikra, with a size of about 34 cm. This bird is also known as Common hawk cuckoo. Upper body is ashy coloured on all parts. Lower portion, such as chin and lower belly is white; the portion between it is brownish coloured. Tip of the wings have slight brownish colours, while the bird is at rest. Tail is having some black spots on it. The beak is ashy coloured, the eyes having a yellow ring and the legs are also yellow coloured. Immature one is brownish coloured and having brownish spots on a white background on lower areas. 'brainfever' is call sound. **Habit:** Solitary. **Habitat:** Gardens, groves, deciduous, evergreen, denser forests, cultivated lands, well wooded forest, gardens, groves, human habitations etc.. **Status:** Resident. **Food:** Caterpillars, insects etc. **Nesting:** May-June, it is a nest parasite of Babbler. **Eggs:** 1, white. **Distribution:** Throughout Kerala. Kole wetlands, KFRI campus, Chimmony Wildlife Sanctuary, Peechi- Vazhani Wildlife Sanctuary.

Order: Cuculiformes

Family: Cuculidae

# 72. Species Name: Indian Cuckoo Cuculus micropterus Gould, 1838

This bird has a size of about 33 cm. The upper body is ashy coloured on all areas but it is having a slight brownish colouration. The wings have brown colour, when the bird is at rest and lower portions are having ashy colour on chin and throat. Lower portions have white colour on which brown spots or black spots are distributed throughout. The beak is pale ash coloured, but slight dark at tips, legs are yellow, eyes having a yellow ring on them. Tail is having ash colour but a large patch of black on the tips. Sound is like 'cross word puzzle'. **Habit:** Solitary. **Habitat:** Mostly seen on trees, deciduous forests, coastal habitats, well wooded forest, gardens and groves. **Status:** Resident with local movements. **Food:** Caterpillars, small organisms which include insects. **Nesting:** Nest parasite on other birds. **Distribution:** Throughout

Kerala. Kole wetlands, KFRI campus, Kerala Agricultural University campus, Chimmony Wildlife Sanctuary and Peechi- Vazhani Wildlife Sanctuary.

Order: Cuculiformes

Family: Cuculidae

#### 73. Species Name: Common Cuckoo Cuculus canorus Linnaeus, 1758

This bird is also known as Eurasian Cuckoo, with a size of about 30-33 cm. The female bird normally shows two type of colouration both are slightly different from male birds. The male is ash coloured on upper parts, the tip of the wings are brownish coloured. Lower portion including chin and throat is ash coloured but rest of the lower portion is white with black or brownish spots. The tail is black; having spots of white distributed. Female bird is either rufous coloured or chestnut mixed with brownish, the latter having a black composition also. Sound is like cuck....koo... Habit: Single or pairs (not confirmed). Habitat: Mostly found among trees. Open and evergreen forest lands, wooded areas etc. Status: Resident (winter visitor to Western Ghats).

Food: Insects. Nesting: March-August. Nest parasite on a number of birds.

Distribution: Throughout Kerala.

Order: Cuculiformes

Family: Cuculidae

## 74. Species Name: Asian Koel Eudynamys scolopacea (Linnaeus, 1758)

It is a familiar bird in Kerala, some times mistaken with crow, with a size range from about 40-43 cm. Male and female birds show sexual dimorphism. The male bird is glistening black all over the body; it may have slight bluish nature at shoulders and its tail. Female bird is having numerous white spots all over the body, which is a brownish colour bird. Legs are black coloured, the eyes are crimson red coloured having a central black spot. The bill is slightly down curved and it is green coloured. It produces the shriek sound Ko...eu...ko...eu... when feed on plantains. Habit: Pairs Habitat: Mostly found among the trees, mango orchards, groves, gardens, city, scrubs, forest areas, cultivated lands, wooded areas etc. Status: Resident. Food: Small organisms, fruits, seeds etc. Start feeding in the early morning. Nesting: April-August, it is a brood parasite on common crow. Eggs: A composition of greyish green having brown to red spots. Distribution: Throughout Kerala. Recorded from Kole wetlands, KFRI campus, Kerala Agricultural University campus, Chimmony Wildlife Sanctuary, Peechi- Vazhani Wildlife Sanctuary and many other areas.

**Order: Cuculiformes** 

Family: Cuculidae

# 75. Species Name: Greater Coucal Centropus sinensis (Stephens, 1815)

This bird is also known as 'crow pheasant' and it has a size of about 45 - 48 cm. This bird has chestnut coloured wings, all other parts of the body is glossy black coloured. The eyes of this bird are crimson red coloured having black spot at its centre. Legs are black coloured but the hind toes nail may be of long one. Beak is black and it is slightly down curved and sexes are alike. Sound is like uk....ook...ok....oop....coop....coop etc. Graduated tail is another diagnostic character. Habit: Single or pairs. Habitat: Scrubs, wooded areas, some what near to human habitations, deciduous, evergreen forests, grasslands, cultivated lands, deciduous scrub jungle, grassland, groves, orchards, riverbanks, irrigated agricultural fields, bamboo forest. Status: Resident. Food: Larvae, eggs of other birds, mice, reptiles, insects etc. Nesting: February-September, it is not a brood parasite, nest made up of twigs in the shape of oval. Eggs: 3 – 4, dull white, both ones share normal duties. Distribution: Throughout Kerala. Specifically recorded from Kole wetlands, KFRI campus, Kerala Agricultural University campus, Chimmony Wildlife Sanctuary and Peechi- Vazhani Wildlife Sanctuary.

**Order: Strigiformes** 

Family: Tytonidae

#### 76. Species Name: Barn Owl Tyto alba (Scopoli, 1769)

Medium sized owl with a size of about 32-36 cm. It bears all character of a typical owl. Grey colour is found above and it is spotted or mixed with black colour. But lower parts are glittering colour of white. Golden buff colour is found mixed in it. Head is heart shaped and faces also the same. Feathers are long and ghost like flight in night is diagnostic character. Sound is composed of shrill, hiss, harsh etc. Sexes are alike. It is found noisy during breeding season. From 2008 onwards, the species was collected by the poachers to meet the demand from North India in black magic. Status: Resident. Found along South West of India up to 1000 m. Habit: Single or Pairs. Habitat: Deserted buildings, cities, ancient forts and ruins, purely nocturnal. Not a forest species. In day time prefer to stand in dark areas and is found close to human habitations. Food: Mainly rat, mice, lizard, small birds and bats. It is useful to farmers, as it feed on rodents which are pest on most of the agricultural fields. Nesting: Throughout year. Nest formed of twigs, rags, straw, stick; these things are

padded to a suitable place. The nests will be used year after year. **Eggs:** 4 to 7 white, smooth and round. **Distribution**: Usually found associated with people. Not found in the forest areas. Recorded from Kole wetlands, KFRI campus, Kerala Agricultural University campus, Chimmony Wildlife Sanctuary and Peechi- Vazhani Wildlife Sanctuary.

Order: Strigiformes

Family: Strigidae

77. Species Name: Collared Scope-Owl Otus bakkamoena Pennant, 1769

It is a horned owl, pale collar or hind neck colouration is diagnostic character. Sexes alike. The sexual dimorphism is expressed by the size of the birds. The male is smaller when compared to the female. There are many sounds produced by this bird. "Wut"? Interrogative tone is produced when coming out of nest, another one, 'kaoq' is for defending, attracting, breeding season etc. Found in densely foliaged trees and it has another name as horned owlet. Brown white spots found above and chin throat assumes a buff white. In under parts, the buff is streaked of black or reddish brown.

Status: Resident. South Western India up to 1200 m and 20° N latitude. It prefers 90 – 1200 m above MSL. Habit: Single or pairs. Mostly wooded country. Habitat: Nocturnal bird. Deciduous forest, open forest grooves, cultivation and urban grooves.

Food: Hunt for beetles and other insects, mice, lizards (occasionally). Eggs: 3 to 5 White, spherical. Distribution: Throughout Kerala. Kerala Agricultural University campus, Chimmony Wildlife Sanctuary, Peechi- Wildlife Sanctuary, Thattekkad Bird Sanctuary. Daytime roost site is reported from Thattekkad Bird Sanctuary.

Order: Strigiformes

Family: Strigidae

78. Species Name: Eurasian Eagle-owl, Great horned owl *Bubo bubo* (Linnaeus, 1758)

This owl has cat like appearance. This is due to its ear tufts and colouration. The ear tufts are diagnostic. Body brown coloured on upper side and it may contain streaks or spots of black colour. It is always in a heavy form and the throat is with a white patch. Eye colours are yellow. The legs of this owl are full of feathers and size may be of about 56 cm. Sound is resonant type bubo... penetrating quality also reported. Similar to fish owl in body colouration. Status: Resident with migratory populations. Habit: Single or pairs, in wooded rocky conditions. Habitat: Nocturnal. Open deciduous forest, cultivation or rocky foothills covered with grass. Banks of

river and streams. Thickly foliaged trees preferred eg. Mango. Mostly found in bush or rocky areas. Food: Small mammals, birds, reptiles. Some time large insects, fish and crabs. Nesting: November to April. Eggs: 3 – 4 dull white, round, smooth. Some times found out of nest on soil, cliffs, bough, shrubs etc. Distribution: Throughout Kerala. Chimmony Wildlife Sanctuary, Peechi- Wildlife Sanctuary. Conservation Status is in Least Concern (LC).

**Order: Strigiformes** 

Family: Strigidae

# 79. Species Name: Forest Eagle-owl Bubo nipalensis Hodgson, 1836

Largest of owls with distinct diagnostic ear tufts, which is also known as 'horns'. Colour of eyes is brown and legs full of feathers. Brown above, whitish buff with black spots. But immature ones are paler and entire body is spotted. Sexes alike and 63 cm is the size of adult. Hoot sound, produced at night is attributed to this bird **Status:** Resident. Western Ghats from Belgaum (Karnataka) up to 2100 m. 16° N latitude. **Habit:** Single or pairs. **Habitat:** Evergreen and deciduous forests. Day time reports come from thick foliage trees. Nocturnal in general habit. In one incident, an electrocuted dead bird was brought to KFRI, Peechi after the bird was found lying below electric lines on the road. **Food:** Birds up to Pea fowl, mammals up to Jackal, pheasants, hare, fawns, barking deer, lizard, snake, fish etc. **Nesting:** December - March. Simple natural nest found in hollow of tree, rock, eagle nests, bare soil etc. **Egg:** Single one, white. **Distribution:** Throughout Kerala (Forests). Mostly found near to thorn forest due to presence of Giant squirrels and Blacknaped hare.

**Order: Strigiformes** 

Family: Strigidae

#### 80. Species Name: Brown Fish-Owl Ketupa zeylonensis (Gmelin, 1788)

Large bird with a size of about 56 cm. The bird gives the appearance with long ear tufts. The tufts are not ears but the long feathers of head. The colour of the bird is brown. Under parts some what pale than upper one and dark bands around breast. But, white patch on throat is distinct. Entire colour may be mixed to black. Eye colour is distinctive golden yellow and it is focusing forward. Sound is deep boom...boom. Status: Resident. South-Western India up to 1400 m. Habit: Single or Pairs. Found in mature trees around water. Habitat: Nocturnal. Reported in wooded, watered areas. Densely foliaged trees preferred and found in their hollows. It may be adjacent to water or human habitations. Steep river banks and overgrown areas are favourite.

Daytime **ro**ost site is reported from Thattekkad Bird Sanctuary. Water bodies have an important part in distribution. Dam site or riparian forest also liked. Never reported in open and dead branches. But during crab feeding, riparian rock forest preferred. Kani tribe keep this owl as pet in their homes at Peppara Wildlife Sanctuary. **Food:** Small mammals, birds, reptiles, carrions (occasionally), fish, frog, crabs and rodents. **Nesting:** December – March. Nest is simple and natural one. It is of a tree hollow, rocky hollows. Old eagle's nest is also used. Cradle of tree trunks such as mango, ficus etc. **Eggs:** 1 –2, white, round. It measures about 58.7 x 48.7 mm. **Distribution:** Throughout Kerala. Kerala Agricultural University campus, Chimmony Wildlife Sanctuary, Peechi-Vazhani Wildlife Sanctuary and Thattekkad Bird Sanctuary.

Order: Strigiformes

Family: Strigidae

#### 81. Species Name: Mottled Wood-Owl Strix ocellata (Lesson, 1839)

Large to medium sized owl. It has a colour of yellow buff with spots of black, brown, white, reddish brown are found. Face with concentric dark bars. Throat is white spotted black or chestnut. Fore neck with white collar. Wings yellow buff during flight, is diagnostic character for this bird. Sexes are alike. Sound is 'hoot...hoot' and 'chu chua....aaa'. The bird is heard than seen. The sound produced by the bird during calm nights is so terrific that local people have many stories about this owl. Considered as bad omen in Kerala. Status: Resident. Throughout south Western India. Habit: Single or pairs. Habitat: Found in rocky open sides with scattered woody areas with low altitudes. Crepuscular and nocturnal one. Open forest, grooves in mango, tamarind and banyan are used. Economic bird due to rodent eating habit. Food: Rats, mice, beetles, crab, insects, lizards, squirrels. Feeding on birds up to rock pigeon is reported. Nesting: November - April. Natural and simple hollow in tree about a height of 4 m from ground. No nesting materials used. Egg: 2,3 round, dull white, 51.1 X 42.6 cm. Magpie Robin, Centipede, Roseringed parakeet are food for juveniles. Male and female has same duty. Distribution: Throughout Kerala, Kole wetlands, Kerala Agricultural University campus and Thattekkad Bird sanctuary. Daytime roost site is reported from Thattekkad Bird Sanctuary.

Order: Strigiformes

Family: Strigidae

82. Species Name: Brown Wood-Owl Strix leptogrammica Temminck, 1831

It is of about 47 cm in size and large in appearance with no ear tufts. Two races are reported; they are *Himalayan (newarensis)* and *peninsular (indranee)*. The owl has round head and chocolate brown buff. Full body is paler and dark brown spots. A white patch on throat found. Sound is 'tok-tu-hoo' musical or variety of errie, sherik, bills, chuckles etc. It is shy and disturbed. **Status:** Resident. Found in Western Ghats of Kerala up to 1800 m. **Habit:** Single or pairs. **Habitat:** Nocturnal. Evergreen, semi green, moist deciduous forest, grooves etc. **Food:** Small mammals, birds, reptiles, fish. **Nesting:** January – March. Nest simple natural, but lined with sticks. It is in a hollow of tree, rock, ravine, roof etc. **Eggs:** 2 **Distribution:** Throughout Kerala. Chimmony Wildlife Sanctuary, Peechi- Vazhani Wildlife Sanctuary and Thattekkad Bird Sanctuary.

**Order: Strigiformes** 

Family: Strigidae

## 83. Species Name: Jungle Owlet Glaucidium radiatum (Tickell, 1833)

Most common owl species found in Kerala. Similar to spotted owlets in appearance, dark brown colour above and some pale rufous among them, below rufous white containing black brown colour. Mustachial patch is white, tail is of short and face is round. No ear tufts as other owls. Rufous patch of under wing is a diagnostic character. Malabaricum race is with richer plumage than radiatum. Sexes alike. Size is small about 20 cm. Sound is various types 'kaok, kaok'... following 'krook krook'. Similar of Barbets 'Wtrrop'. It may be used to avoid mobbing diurnal birds, 'kaok, kuk' call during dusk, 'ttrrooo' at night in regular interval, Day time movement is common. Status: Resident. Western Ghats up to 2000 m. Country foothills up to 1500 m altitude. Prefer 900 - 2100 m above msl. Habit: Single or pairs. Habitat: Open deciduous forest and evergreen forest. The bird is nocturnal and crepuscular. Found among Drongo in open forest of bamboo and teak. Reported in moist deciduous biotope also. Food: Mainly beetles and insects, Locusts, grasshopper, cicadas, molluscs, lizards, birds, mice. Nesting: March - May. Nest is simple and natural tree hollow, usually 3-8 m from ground preferred. It is not lined with any things. Eggs: 2 - 4, Round and oval. Distribution: Throughout Kerala. Chimmony Wildlife Sanctuary, Peechi- Vazhani Wildlife Sanctuary (day time roost is also found from here) and Thattekkad Bird Sanctuary.

Order: Strigiformes

Family: Strigidae

#### 84. Species Name: Spotted Owlet Athene brama (Temminck, 1821)

It has about 22 cm size and three races reported based on size and colouration. It can be seen easily and has no ear tufts, but has eyes directed forward. Yellow eyes with white colour below having spots which is a diagnostic character. Sexes alike. Day time roosts are reported from tree branches, trunks and other places. It is like a clown due to the mode of behaviour. Sound is 'chirurr...chirurr, chreek, chreek'chuckles, screams. Noisy during breeding season and this is the most common owlet. Status: Resident. Entire South Western India. Habit: Pairs, small flocks (3 - 4 individuals). Habitat: Scrubs, open cultivations, estuaries, almost close to human habitations, some time in dwellings, but do not like heavy forests. It is nocturnal and crepuscular one. It is found in mango trees and eucalyptus. Food: Mostly beetles, insects, sometimes young and small birds, mice, lizards, insectivorous food, composed of moths, locusts and earthworms. Nesting: November - March. Nest is simple and natural one and usually a hole found in tree trunk, dwelling houses and also on deserted areas. Some reports point out that, it is found in little grass, with tow, feathers etc. Eggs: 3 – 4, White round, oval. It measures about 31.6 x 27.4 mm. Distribution: Throughout Kerala. Kole wetlands, KFRI campus and Kerala Agricultural University campus.

Order: Strigiformes

Family: Strigidae

#### 85. Species Name: Brown Hawk-Owl Ninox scutulata (Raffles, 1822)

Above part is composed of grey to brown, but under parts red to brown. Mixed combination of this is mostly recorded. Head white colour. Shoulders have some spots and just below have streaks of lower colour. Rest of lower region is white with streaks of red brown. Tail has white tips. Two races are reported *lugubris* and *hirstua*. The former is paler, but latter is darker. *Lugubris* also has long wings. Size is of 32 cm. Sound may be of 'oo...uk...oo...uk' when it is coming out of roost. 'Wut' sound for foraging, rarely on evening. 'Woo...' during breeding season. **Status:** Resident. In Western Ghats about 1300 m. **Habitat:** Open forest preferred. Edge of tall trees but mid stratum of canopy with dead branch is mostly preferred. It may be found some time near to water. **Food:** Large insects, frogs, lizards, small birds, mice. **Nesting:** January – July. Nest is simple and natural usually found in tree trunk hollow. **Eggs:** 3 – 4, White, round. Incubation shared by both, it may be of about 24 days. Egg size is 36 X 31 cm. **Distribution:** Throughout Kerala. Kerala Agricultural University

campus, Chimmony Wildlife Sanctuary and Peechi- Vazhani Wildlife Sanctuary. It is reported that they are active even up to 10 am during September in Thattekkad Bird Sanctuary.

Order: Coraciiformes

Family: Alcedinidae

#### 86. Species Name: Small Blue Kingfisher Alcedo atthis (Linnaeus, 1758)

It is also known as common kingfisher; it has a size of about 18 cm. Upper body have bluish colour, but it may have the appearance of greenish composition. Some time a glittering effect is also felt. Head portion having some dark feathers which is mixed with bluish plumage, there is a small patch in the eye region which is composed of chestnut colour and pure white with separate regions. The eyes are black, legs reddish and bill black or blackish mixed but long and sharp ended. Lower portions of the bird are chestnut or reddish brown coloured, white patch on chin parts. Sound is like chickee...chichiee...chichee. Sexes are alike. Habit: Solitary and pairs. Habitat: Mostly in water logged areas, rivers, streams, canals, irrigation reservoirs, flooded ditches which include fresh water and salt pans, estuaries, city ponds, streams etc. Status: Resident with migratory populations. Food: Mainly fish, but it feeds on tadpoles and small organisms in water. Nesting: March-June, nest made in earth as a long hole, around its habitat. Eggs: 5-7, white oval. Distribution: Throughout Chimmony Wildlife Sanctuary and Peechi- Vazhani Wildlife Sanctuary and all over Kerala.

**Order: Coraciiformes** 

Family: Alcedinidae

#### 87. Species Name: Stork-billed Kingfisher Halcyon capensis (Linnaeus, 1766)

As the name indicate the beak of this kingfisher is large and the bird have a size of about 38 cm. Head of this kingfisher is chocolate brown coloured, neck portion on upper and lower portions having glittering yellow mixed brown, lower portion including chin is homogenously composed of this colour. Upper body and upper tail coverts are dull grey coloured. Eyes are black, beak is large and reddish coloured, legs are also reddish. Sound is like chuckling type ke..ke...and peer..peer. Sexes are alike; due to its colour and beak, it can easily be distinguished. Habit: Solitary or pairs. Habitat: Mostly found in and around well watered areas, which include estuaries, mangroves, evergreen and deciduous forests, streams, paddy fields, irrigation reservoirs, flooded ditches etc. Status: Resident. Food: Fish and aquatic organisms. It

may feed on eggs of other birds. Nesting: January-July, typical nest of Kingfishers.

Eggs: 4-5, white oval. Distribution: Throughout the wet lands of Kerala. Kole

wetlands, Chimmony Wildlife Sanctuary and Peechi- Vazhani Wildlife Sanctuary.

Order: Coraciiformes

Family: Alcedinidae

88. Species Name: White-breasted Kingfisher Halcyon smyrnensis (Linnaeus,

1758)

It is also known as white throated kingfisher, as the name indicates there is a white patch on breast and throat area. Head of this kingfisher is chocolate brown coloured, the same colouration is found along the lower parts, but white areas on chin, throat and breast is an exception. Upper body plumage is glittering bluish, but has a slight purple colour; there are black patches on shoulders and also on lower end of wings. Eyes are similar coloured that of head, bill is long and reddish and legs are dark reddish. Tail is longer i.e. having a medium size, the size of this bird is about 28 cm. Sound is like chuckling ke..ke..peer..per... etc. Sexes are alike. Habit: Solitary. Habitat: Found in watered and non watered areas, which include gardens, road sides, paddy fields, estuaries, mangroves, deciduous and evergreen forests, irrigation reservoirs and flooded ditches. Status: Resident. Food: Fish and insects. But it also feeds on tadpoles, very rarely on small birds, mice etc. Nesting: March-July similar to other kingfishers. Eggs: 4-7 white, round shaped. Distribution: Up to 2000 m, throughout Kerala. Kole wetlands, Chimmony Wildlife Sanctuary and Peechi-Vazhani Wildlife Sanctuary.

Order: Coraciiformes

Family: Alcedinidae

89. Species Name: Black-capped Kingfisher Halcyon pileata (Boddaert, 1783)

This bird has got some similarity with white breasted kingfisher; size may slightly greater than latter, about 30 cm. As the name indicates, head has glittering black colour, throat and a part of breast. Rest of the upper portion is black coloured; black patch is present on its shoulder parts. Lower portion having a more reddish nature, legs are reddish, black eyes, the bill is sharply ended and having some black colour on base and red on the rest. Sexes are alike sound is similar to whitebreasted kingfisher. Habit: Solitary. Habitat: Mostly found in marine areas but reported in streams, forests, estuaries, saltpans, irrigation reservoirs, flooded ditches etc. Status: Resident. Food: Fish, small marine organisms. Nesting: May-July. Similar to other Kingfisher.

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Eggs: 4-5 White round shaped. Distribution: Kole wetlands, throughout the wet

lands of Kerala.

**Order: Coraciiformes** 

Family: Alcedinidae

90. Species Name: Lesser Pied Kingfisher Ceryle rudis (Linnaeus, 1758)

This bird is also known as pied kingfisher with a size of about 30 cm. On the head, number of feathers is in upright position and the colour is composed of black and white intermixed together. Upper body plumage is similar one i.e. black and white areas mixed together. Tail has black and white areas. Male and female almost alike, but male has more breast bands, female has only one. Lower portions are white, dagger shaped black bill, eyes and legs are black. Sound is like chirruk... chirruk etc. Darker coloured. Travancore Pied Kingfisher (Ceryle rudis travancorensis) is found in Kerala. Habit: Single or pairs. Habitat: Paddy field, swamps, estuaries, rivers, streams, ponds, tidal creeks irrigation reservoirs, flooded ditches etc. Status: Resident. Food: Fish, frog, small aquatic organisms. Nesting: October-May. Similar to kingfishers. Eggs: 5-6 white, not in smooth round shape. Both have their own part in nesting duties. Distribution: Throughout the wetlands of Kerala, Kole wetlands,

Order: Coraciiformes

Family: Meropidae

91. Species Name: Blue-bearded Bee-eater Nyctyornis athertoni (Jardine & Selby,

Chimmony Wildlife Sanctuary and Peechi- Vazhani Wildlife Sanctuary.

1828)

Size of this bird is of about 36 cm, upper portion of the body is green coloured, which is continued from head to rest of upper area. Lower portions including chin and breast feathers are bluish coloured, rest of the lower portions are with slight brownish coloured feathers. Tail is medium sized; eyes are dark brownish coloured with a central black area. Legs are black; beak is long, sharp ended and down curved. Sound is like kor...r...r... Habit: Single or pairs. Habitat: Evergreen, Moist deciduous forest, inland wetlands, backwaters and estuaries. Status: Resident. Food: Insects, it also feeds on honey of flowers and beak is an adaptation for this. Nesting: February-August. It is a ground nester and make nest in the form of a long hole, ending in egg chamber. Nest found in and around forests streams. Eggs: 4-6, white. Distribution: Nilgiris, Western Ghats, throughout the forests of Kerala up to 1700 m.

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Order: Coraciiformes

Family: Meropidae

#### 92. Species Name: Small Bee-eater Merops orientalis Latham, 1801

Small bird with a size of about 21 cm which is known as Little green Bee-eater, Green bee eater etc. Green coloured bird with a reddish head, ash border can be seen on the edges of wings, slight bluish colour may present below the chin, throat etc. A typical black line can be seen elongated from the eyes, such a clear boarding black ring can be seen on breast areas, which is a diagnostic character. Tail may be dull coloured compared to body colour, the tail feathers elongated to narrow pins which is a diagnostic character. Bill is long slender and down curved (slightly), eyes are dark reddish brown, legs black. Sexes are alike sound is tree..tre... tit..tit.... Habit: Pairs, small groups. Habitat: Gardens, open areas, mostly in and wetlands, estuaries orchards, waste lands, moist deciduous forest, agricultural fields, inland wetlands, backwaters, etc. Status: Resident. Food: Insects (Diptera and Hymenoptera). Nesting: February-May, ground nester, nest is a longitudinal tunnel ending in egg chamber. Eggs: 4-7, white oval. Both sexes are involved in nesting and parental duties. Distribution: Throughout Kerala. Kole wetlands, Chimmony Wildlife Sanctuary and Peechi- Vazhani Wildlife Sanctuary.

Order: Coraciiformes

Family: Meropidae

#### 93. Species Name: Bluetailed Bee-eater Merops philippinus Linnaeus, 1766

It can be easily distinguished from Small bee-eater due to its size, it may range about 31 cm. Upper and lower portion of body is green coloured, throat and chin areas are chestnut coloured, rest of the lower portions are green coloured, the tail is long and it is bluish and rump is also similar, it is distinctively visible at flight. Two feathers extended from tail and pointed at tips. The beak and legs are black and eyes are reddish; a black line around the eye is visible. Sexes are almost alike, sound is like te...tew.. Habit: Normally in flocks. Habitat: Wooded and stream or water logged areas, marshes, moist deciduous forest, inland wetlands, backwaters, estuaries etc. Status: Winter visitor. Food: Insect. This may be composed of several kinds of insects. Nesting: March-June, ground nester similar to other bee-eaters. Eggs: 5-7 white oval. Both share nesting and parental care duties. Distribution: Throughout wet lands of Kerala. Kole wetlands and Peechi-Vazhani Wildlife Sanctuary.

Order: Coraciiformes

Family: Meropidae

94. Species Name: Chestnut-headed Bee-eater Merops leschenaulti Vieillot, 1817

This bird has a size of about 20-21 cm, as the name indicates the colour of head is chestnut, which may be seen up to upper neck and on nape and back areas. The wings and rest of upper portions are green coloured, a yellowish colour may seen on throat portions, lower portion are green coloured, eyes are reddish; beak is black and slightly down curved. Wings are sharp ended which can be seen during flight, legs are black. Sexes are alike. Habit: Flocks (8-30 individuals). Habitat: Deciduous and moist deciduous forest and reported in wooded countries, coastal regions etc. Status: Resident. Food: Insectivorous. Nesting: February – May, local variations are reported. It is a ground nester; nest is similar to other similar birds. Eggs: 5-6 white oval. Distribution: Throughout Kerala.

Order: Coraciiformes

Family: Coraciidae

95. Species Name: Indian Roller Coracias benghalensis (Linnaeus, 1758)

Size about 30-31 cm, dull brown portions are seen on the upper and lower areas. Faint brown and black streaks present on the lower throat, chin portions. Head has a slight greenish area and on the wings there is a bluish patch, it is also found on tail. Beak is heavy and black coloured, the legs are yellow and eyes have a brownish part and a central black area. During flight the bluish nature of the wings can be clearly seen, which is a diagnostic feature of this bird. Habit: Normally solitary. Habitat: Wooded area, open cultivations and found in deciduous forest, agricultural fields, inland wetlands, backwaters, estuaries, gardens etc. Status: Resident but exhibits some local movements. Food: Insectivorous, lizards and other similar organisms. Due to insectivorous nature, it is a beneficial bird to farmers. Nesting: March-July. It make nest in natural holes present in tree trunks and also in buildings. The nest is smoothened with soft materials. Eggs: 4-5 white oval. Distribution: Throughout Kerala. Kerala Agricultural University campus and Peechi- Vazhani Wildlife Sanctuary.

Order: Coraciiformes

Family: Upupidae

96. Species Name: Common Hoopoe Upupa epops Linnaeus, 1758

This bird has a size of about 31 cm, it is also known as 'Eurasian Hoopoe'. Head has a crest which is brownish coloured at the basal area and black spots and streaks are present throughout length (when it is not stretched or erected). Black spots can be seen at tips, when it is erected. Lower areas like chin, throat, upper portions like upper neck, shoulders are brownish coloured. Rest of the upper portions are black and white intermixed like zebra lines. Tail has white patch at its middle. Lower portions are white coloured, legs are ashy coloured, eyes are black, bill is long, slightly down curved and brownish. Sexes are alike. Habit: Single or pairs. Habitat: Open cultivations, forests, gardens, beaches, deciduous forest, cultivation, neighbourhood of villages and habitations etc. Status: Resident. Food: Insectivorous, so it is highly beneficial to farmers. Nesting: February-May. It is a hole-nester; it uses natural hole and hole in the buildings. The nest is smoothened with all possible materials. Eggs: 5-6 white, both one take part in parental care. Distribution: Throughout Kerala. Kole wetlands, KFRI campus, Kerala Agricultural University campus, Chimmony Wildlife Sanctuary and Peechi- Vazhani Wildlife Sanctuary.

Order: Coraciiformes

Family: Bucerotidae

## 97. Species Name: Malabar Grey Hornbill Ocyceros griseus (Latham, 1790)

Malabat Grey hornbill has a size of about 59 cm. It has no casque on the bill and it has reddish portions. Overall body colour is of a grey or ash coloured, white feathers may found at the base of bill, throat and breast areas. The eyes are black and dark portion around the eyes is a diagnostic feature, Legs are black coloured, the tail is ashy coloured, having small white feathers on the border areas, which is present at the end of the tail. White feathers present on the primaries of wings, which is clearly visible while the bird is at flight. Sexes alike, sound is like kyah...kayah.... Habit: Single or pairs, parties. Habitat: Mostly found in evergreen forests, moist deciduous forests, especially abundant on Ficus trees. Status: Resident. Food: Fruits, insects and other similar small organisms. Nesting: January - March. It is a hole nester, the nest is covered with 'shit' of the bird, when the female is within the nest. After hatching of eggs, the smoothening material is removed and both sexes are involved in parental care. Eggs: 3-4, white. Distribution: Western Ghats of Kerala, mostly up to 1600 m. Chimmony Wildlife Sanctuary and Peechi- Vazhani Wildlife Sanctuary.

Order: Coraciiformes

Family: Bucerotidae

#### 98. Species Name: Indian Grey Hornbill Ocyceros birostris (Scopoli, 1786)

Size ranges about 60-61 cm, this bird is almost similar to Malabar Grey Hornbill but due to its casque on the beak is can be identified from the latter. It has a long down curved bill which is Grey at its base and yellowish at the tips. The casque is present on both individuals but the size in male and female may vary and is smaller in the case of female. Eyes have a brownish ring and black at its tips. The tail is graduating and it has white and black feathers at its tips. Overall body colour is grey, sound is like k..k..k.. ka..e... Habit: Small parties. Habitat: Mostly found in trees, dry forests, scrubs, cultivations, evergreen forest, especially abundant on *Ficus* trees. Status: Resident. Food: Fruits, insects, small organisms. Nesting: March-June, it uses hole in the tree other characteristics is similar to Malabar Grey Hornbill. Eggs: 2-3 white, both take part in parental duties. Distribution: Up to 1000m, Trichur, Palakkad, Kerala Agricultural University campus. Mostly in drier areas.

**Order: Coraciiformes** 

Family: Bucerotidae

#### 99. Species Name: Great Pied Hornbill Buceros bicornis Linnaeus, 1758

This bird is also known as Great Hornbill with a size of about 130 cm. It has a massive beak which is yellow coloured and has a casque at its base, which is smaller in the case of female birds. Head portion is black coloured, in which red eyes in male and reddish eye brows and yellowish eye in female is diagnostic. Golden yellow colouration is found on chin, throat and upper neck areas. Upper body and breast is black. Lower portions are white coloured. Wing having white edges and yellow markings or patches. Yellow tail has black patch on it. Sound is like gang...tok... etc. **Habit:** Single or pairs. **Habitat:** Evergreen forests, moist deciduous forest especially abundant on *Ficus* trees. **Status:** Resident. **Food:** Fruits, insects and small organisms. **Nesting:** February – April. Nest is found in large forest trees, other character is similar to Hornbills. **Eggs:** 2. **Distribution:** Throughout Kerala up to 1500 m. Chimmony Wildlife Sanctuary, Peechi-Vazahani Wildlife Sanctuary. **Conservation Status:** Near Threatened. Endangered due to loss of habitat and nesting trees.

Order: Piciformes

Family: Capitonidae

#### 100. Species Name: White-cheeked Barbet Megalaima viridis (Boddaert, 1783)

It has another name as Small green Barbet, with a size of about 23 cm. Head is brown coloured, the same is found on upper neck and lower neck but in lower side it

has white patches dispersed all over. Chin portion is white in colour. The upper body and lower are green coloured, there is a prominent white patch present on the sides of the eye. Eyes are brownish coloured, beak is large and brownish coloured, the legs are greenish and tail is small. Sexes are alike, sound is kotroo....and knea..oh. Small hair like feathers is found on the base of the bills. Habit: Pairs or parties, small flocks. Habitat: Evergreen, deciduous forests, estuarine areas, gardens, groves, cultivations etc. Status: Resident. Food: Fruits, nectar, figs, berries, vary rarely small insects. Nesting: December – June, nest is similar to other Barbets. Eggs: 3, both parents share parental care duties. Distribution: Western Ghats, throughout Kerala. Kole wetlands, KFRI campus, Kerala Agricultural University campus, Chimmony Wildlife Sanctuary and Peechi-Vazhani Wildlife Sanctuary.

Order: Piciformes

Family: Capitonidae

101. Species Name: Coppersmith Barbet Megalaima haemacephala (P.L.S. Muller, 1776)

The name is due to its call; this bird is also known as Crimson breasted Barbet. Fore head portion has reddish colour, yellow rings present around the eyes, throat is yellow the same coloured ring is present on the breast areas. The red coloured patch is present on the upper breast areas. The rest of the head has a blackish tinge and the body is dull green coloured. The legs have a reddish nature and the tail is very short. Sexes are alike; sound is like tuk...tuk... small hair like feathers are found on the base of beak. Habit: Single or pairs. Habitat: Mostly met with trees, wooded areas, gardens, deciduous forests, groves, cultivations etc... Status: Resident. Food: Fruits, berries, very rarely insects. Nesting: January – June. It is a hole nester and hole found in tree trunks. Eggs: 3, white, both parents involve in domestic duties. Distribution: Throughout Kerala. Up to 1000 m. KFRI campus, Kerala Agricultural University campus, Chimmony Wildlife Sanctuary and Peechi- Vazhani Wildlife Sanctuary.

Order: Piciformes

Family: Picidae

102. Species Name: Brown-capped pygmy woodpecker *Dendrocopos nanus* (Vigors, 1832)

Brown capped pygmy woodpecker is also known as pygmy woodpecker, which has no crest. It has a size of about 13 cm and head portion has brown coloured areas. But there is a white patch which runs from the side of the eye to neck portion, in

which a red patch found in male birds and which lacks in female birds. Upper portion of the body is brown coloured and which has a number of white spots distributed throughout. Lower portion of the body is dull white coloured, which has a number of brown streaks. Beak is brown, legs have an ashy area, and eyes are brilliant brown coloured. Sexes are almost alike. Sound is very faint like click...r...r... Habit: Single or pairs. Habitat: Evergreen, deciduous forests, light forests, secondary outgrowths, scrub, moist deciduous forest, plantation etc. Status: Resident. Food: insects, figs, berries, plant parts (soft). Nesting: February – April. Local variations reported. Eggs: 2-3 White. Distribution: Throughout Kerala. Chimmony Wildlife Sanctuary and Peechi- Vazhani Wildlife Sanctuary.

Order: Piciformes

Family: Picidae

103. Species Name: Yellow-fronted Woodpecker Dendrocopos mahrattensis (Latham, 1801)

It is also known as Yellow crowned woodpecker, size may be of about 18 cm. Head has yellow colour, just below it the crest, which is smaller and reddish coloured. In female the crest is yellow and there is no red colour. Lower portions of the body is white coloured and just below breast, it is brownish in colour and abdomen parts are reddish coloured. Upper body parts are in black and white spots. The tail of this bird is wedged, legs are ashy, bill is longer and black and eyes are also of same colour. Sound is like click...r...r.... Wedged tail helps in support for climbing trees. It uses rapid wing beats and a pause period of closed wings, during flight and it moves slightly up and down as in like gliding (Typical woodpecker flight). Habit: Solitary or pairs. Habitat: Scrubs, deciduous forests, gardens, orchards, moist deciduous forest, plantations etc. Status: Resident. Food: Insects, ants etc.. Nesting: January -May. It makes its own nest hole on tree mostly opening towards under portions. Eggs: 3, both parents involve in domestic duties. Distribution: Southern Western India up to 2000 m. Throughout Kerala. KFRI campus, Kerala Agricultural University campus, Chimmony Wildlife Sanctuary and Peechi- Vazhani Wildlife Sanctuary.

Order: Piciformes

Family: Picidae

104. Species Name: Rufous Woodpecker Celeus brachyurus (Vieillot, 1818)

Size may be of about 25 cm and the body colouration is chestnut. Upper and lower parts of the body are chestnut and the upper portion of the wing has small black

markings. The tail is wedged and has also black markings and the legs are ash coloured. The bill is large and black and the eyes are reddish with a black central area. There is a red patch below the eyes in male, which is absent in the female. Sound is like kayn...kayn. This bird has a peculiar habit of making nest inside the nest of tree ants and the adult and immature being unaffected. Habit: Pairs. Habitat: Evergreen, secondary jungles, moist deciduous forest, plantations, gardens etc. Status: Resident. Food: All forms of tree ants. Nesting: February – April. It make nest inside the nest of tree ants (Crematogaster). Eggs: 2-3 white. Distribution: Western Ghats up to 1000 m, throughout Kerala.

Order: Piciformes

Family: Picidae

105. Species Name: Great Black Woodpecker Dryocopus javensis (Horsfield, 1821)

Large bird with a size of about 28 - 30 cm. This bird is also known as White bellied woodpecker. The whole body is clear black coloured, small white portion is present on the rump and abdominal parts. A crimson red coloured crest is present and same coloured patch present on cheek areas, forehead etc... But in the case of female it is found at nape. Bill is long and black, the legs are ashy black coloured and the nails on them are clearly visible. Tail is wedged. Sound is like kek... Habit: Pairs or parties. Habitat: Evergreen, deciduous forest, plantations, tall trees, moist deciduous forest etc. Status: Resident. Food: Insects, ants, beetles etc. Nesting: January -March. It is a hole nester, nest usually found in tree trunks. Eggs: 2, Both share parental duties. Distribution: Throughout the forests of Kerala. Kerala part of Western Ghats, Chimmony Wildlife Sanctuary, Peechi-Vazhani Wildlife Sanctuary and Silent Valley National park.

Order: Piciformes

Family: Picidae

106. Species Name: Small yellow-napped Woodpecker Picus chlorophus Vieillot, 1818

This bird is also known as Lesser yellow nape. Head and forehead portions are crimson red, below the eye and in the case of female; the crimson coloured portion is very much confined to head. The crest is yellow coloured in both and the neck has prominent yellow portions. Upper portion of the body is greenish brown and tail is wedged having black colour. Lower portions is chocolate coloured with white spots

distributed in abdominal and chin areas. Reddish coloured eyes and black coloured legs and the beak is black but having yellow shade on basal portions. Sound is like cheenk....peer....etc... Habit: Mostly in pairs. Habitat: Evergreen, moist deciduous forest, bamboo secondary growth etc. Status: Resident. Food: Ants, insects, very rarely berries, fruits pulp etc... Nesting: April – May. It is a hole nester and make its own nest. Eggs: 2, long round shape. Distribution: Western Ghats up to 1800 m. Throughout Kerala.

Order: Piciformes

Family: Picidae

107. Species Name: Little Scaly-bellied Green Woodpecker *Picus xanthopygaeus* (J.E. Grat & G.R. Gray, 1846)

It is also known as Streak throated woodpecker. Upper portion of the body is greenish black coloured; sides of the wings have black and white spots. The tail has a blackish colour, having white patches, which are very faint. Yellow colour on the upper portion can be seen while at flight and there is a crimson red coloured head portion. The crest is also same but in the female it is black. Lower portion of the body is faint green coloured, which has fish net shaped black markings and in lower tail coverts, white and brownish nets are found. Chocolate coloured cheeks, bill is long black which has a light yellow base and the legs are same but less green coloured. Habit: Single or pairs. Habitat: Deciduous forest, rubber plantations, jungles. It is also found in drier areas, moist deciduous forest, plantations etc. Status; Resident. Food: Ants, insets, termites and some authors reported that it feeds on larvae from cattle dung. Nesting: January – June. It makes its own nest in the tree trunks. Eggs: 3-5 white, both share all domestic duties. Distribution: Throughout Kerala. Western Ghats up to 1800 m.

Order: Piciformes

Family: Picidae

108. Species Name: Common Flame back Dinopium javanense (Ljungh, 1797)

Common Golden-backed woodpecker, Goldenbacked three toed woodpecker are another names of this bird. It has a size of about 28 cm. The crest is crimson coloured in male and black in female. Neck and nape is black and side portion having a number of black and white lines. Upper portion of the body is orange golden coloured; the rump portion has a crimson patch which is diagnostic during the flight. The lower abdominal parts are having white colour. The legs are ashy coloured, the beak is

pointed and black; reddish eyes and tail is black and wedged. The inner toe is missing which is the diagnostic character. Shrilling ti...n....ti....ni... sound produced. Habit: Pairs or parties. Habitat: Evergreen, moist deciduous, foot hills, plantations etc. Status: Resident. Food: Insectivorous, it feeds on all stages of insects. Nesting: January – March. It is a hole nester and make its own nest in tree trunks. Eggs: 2, both parents share all duties. Distribution: Dinopium javanense malabaricum found in Western Ghats of Kerala. Chimmony Wildlife Sanctuary, Peechi-Vazhani Wildlife Sanctuary and throughout Kerala.

Order: Piciformes

Family: Picidae

109. Species Name: Lesser Golden-backed Woodpecker *Dinopium benghalense* (Linnaeus, 1758)

Blackrumped Flameback and Goldenbacked woodpecker are the other names of this bird and it has a size of about 29 cm. In male, the crown and crest is crimson red but in female, crown is having black with white spots. Cheek is having black and white lines upper neck is black, upper body is golden coloured, with black markings and white patches on wings. Chin, throat, breast having fish net shaped black marking and inner portion of this net is white. The beak is sharp and black, tail wedged and black, only 3 toes in ashy coloured legs and eyes are reddish. The sound is like ke..ke..i..i.. Habit: Single or pairs. Habitat: Evergreen, deciduous forest, plantations, scrub jungles, estuaries, gardens, coconut plantations, moist deciduous forest, plantations etc. Status: Resident. Food: Ants, insects, very rarely feed on fruit pulp and flower nectar. Nesting: March – August, hole in tree trunks, mostly it makes its own nest. Eggs: 3, white both involve all duties. Distribution: Kole wetlands, KFRI campus, Kerala Agricultural University campus, Chimmony Wildlife Sanctuary, Peechi-Vazhani Wildlife Sanctuary and throughout Kerala.

Order: Piciformes

Family: Picidae

110. Species Name: Black-shouldered woodpecker *Chrysocolaptes festivus* (Boddaert, 1783)

This bird is also known as Whitenapped woodpecker and Black backed woodpecker. It has a size of about 29 cm, in male birds, the crest is crimson coloured but in the female it is golden yellow coloured. Upper neck is black; the cheek portion has black and white markings. In the upper portion of the body, it has a 'V' shaped

white patch and a black mark around it. Rest of upper areas are golden yellow coloured. Below portion has fish net shaped markings of black and in the centre of it has white colour. Beak is long, black, eyes reddish, tail is wedged and black. This bird is usually confused for golden backed woodpecker. Sound is like a chattering laugh of kwirr....r...r.. etc. Habit: Pairs or singly. Habitat: Deciduous forests, groves, etc. Status: Resident. Food: Ants and other tree dwelling insects, grubs, etc. Nesting: November – March. It is a hole nester and some time uses disused holes of other birds. Eggs: 1, white both parents involve in all duties. Distribution: Mostly in drier areas.

Order: Passeriformes

Family: Pittidae

#### 111. Species Name: Indian Pitta Pitta brachyura Linnaeus, 1766

This bird has a size of about 19 cm. Upper body portion has greenish coloured parts, with bluish patch just below the shoulders and on rump portion, which is clearly visible in light. Head has black line and fulvous, line. Cheek portion is of black, under parts are fulves, but chin and throat is white and there is a small white eyebrow. The beak is black brown coloured, tail is very short and the legs are having brownish bright colours, with dark brown eyes. During flight the white round spot on the wing is distinct and sound is like a double knot whistle of piou...peeous and wheet-tew which is heard during evening and mornings. Sexes are alike. Habit: Single. Habitat: Wooded areas, deciduous forest, semi cultivations, scrub jungle, evergreen forests, gardens etc. Status: Winter visitor. Food: Insectivorous, it is a ground feeder. Nesting: May —August, round shape and made of twig and similar lengthy flexible materials. It is found in scrub areas or smaller trees. Eggs: 4-6, white, faint colouration lines of other combinations are also found. Distribution: Throughout Kerala. KFRI campus and Peechi-Vazhani Wildlife Sanctuary.

Order: Passeriformes

Family: Motacillidae

#### 112. Species Name: Forest Wagtail Dendronanthus indicus (Gmelin, 1789)

Medium sized bird with a size of about 17-19 cm. Upper body is light chocolate coloured and the wings have brown black bands followed by white, brown and white. A similar coloured band is seen on the back, like a necklace and rest of the lower portion is dull white coloured. There is a white eyebrow and the same is seen around the eyes. The eyes are brownish black, similar coloured bill is down curved and the

legs are some what long and reddish coloured. The tail is chocolate brown and medium sized, sound is like a clicking. Habit: Solitary. Habitat: Deciduous forests, evergreen forests, plantations, mixed bamboo jungle etc. Status: Winter visitor. Food: Mostly insect and other organisms. Nesting: May, nest made up of small sticks, twigs and other such materials. Eggs: 4, dull coloured. Parental duties by female alone. Distribution: Throughout Kerala. Chimmony Wildlife Sanctuary, Peechi-Vazhani Wildlife Sanctuary and Silent Valley National Park.

Order: Passeriformes

Family: Motacillidae

# 113. Species Name: Large Pied Wagtail Motacilla maderaspatensis Gmelin, 1789

Whitebrowed wagtail is another name of this bird and its size may be of about 18-20 cm. This bird may be some times confused with Magpie Robin, but it can easily identify due to its colour pattern. Upper portion of the body is completely black, in which white eye brow and whitish ring around the eyes are more distinct. Edges of the wings have white patches in between them; small black lines are also distributed. Lower portions are completely white and there is a prominent white line present on the sides of the tail. The sound is almost equal to Magpie Robin. Habit: Pairs. Habitat: Mostly along fresh water lands, but reported in estuarine areas, also. Moist grassy ground, pond margins, cultivation. Status: Resident. Food: Similar to other Wagtails. Nesting: March —September, nest made up of root like materials, it is mostly found in underside of buildings and other sheltered areas. Eggs: 3-4, Grey, both share all duties. Distribution: Throughout Kerala, Kole wetlands, Chimmony Wildlife Sanctuary, Peechi-Vazhani Wildlife Sanctuary and Silent Valley National Park.

Order: Passeriformes

Family: Motacillidae

# 114. Species Name: Grey Wagtail Motacilla cinerea Tunstall, 1771

Upper body including head upper neck have grey black colour, darker bands are seen on the sides of the wings and white lining is on above the eyes and in the cheek portion starting from beak. Rump is yellow coloured and the whole lower portion is yellow. Beak is black and the tail is having a more grey nature and white lines are seen on the sides of the tail. Legs are long, hind toe nails distinct, the legs having a reddish brown colour. In breeding season, chin of male having black portions and white marking on backside. Sound is like chi.. chich... sexes are alike in non breeding

season. Habit: Solitary. Habitat: Streams, marshy lands, estuarine habitats, foot hills, moist grassy ground, pond margins, cultivation etc. Status: Winter visitor. Food: Similar to other Wagtails. Nesting: Not in Kerala, May – July, nest made up of grassy, root materials inside the bushy areas. Eggs: 4-6, Yellowish coloured. Distribution: Throughout Kerala. Kole wetlands, Kerala Agricultural University campus, Chimmony Wildlife Sanctuary and Peechi-Vazhani Wildlife Sanctuary.

Order: Passeriformes

Family: Campephagidae

#### 115. Species Name: Scarlet Minivet Pericrocotus flammeus (Forster, 1781)

Orange minivet is another name of this bird and it has a size of about 20-22 cm. Male and female birds show sexual dimorphism. The male bird having black head, chin, throat, upper portion wing ends etc. Orange colour found on wing patch, lower breast and abdominal part, tail having a line of orange and rest is black. Female have grey part on head, upper portion and yellow patch on wings. Chin, throat, breast are light yellowish, lower parts also the same coloured. The legs, bill eyes are black. Sound is like twitee....whirrii etc. Habit: Parties. Habitat: Mostly met with trees, cultivated lands, gardens, forest lands, dry deciduous forest, moist deciduous forest, sholas, gardens etc. Status: Resident. Food: Insectivorous. Nesting: April – July. Nest made up of root like flexible materials. Eggs: 2-4, brownish coloured. Both parents have parental duties. Distribution: Throughout Kerala. KFRI campus, Kerala Agricultural University Campus, Chimmony Wildlife Sanctuary, Peechi- Vazhani Wildlife Sanctuary and Silent Valley National Park.

Order: Passeriformes

Family: Pycnonotidae

#### 116. Species Name: Red-whiskered Bulbul *Pycnonotus jocosus* (Linnaeus, 1758)

As the name indicates Whiskers is red coloured and the size of the bird may of about 20 cm. Head is black and a black crest is also diagnostic, which is pointed. Upper body is brown coloured which have a small patch on the lower breast. Lower portion is completely white. Lower tail coverts are crimson red coloured. The tail is long and brown coloured, eyes are reddish, bill is back and legs are also the same. A musical call produced like pik...pikloo.. Sexes are similar. The crest gives the appearance of double headed bird. Habit: Pairs or parties. Habitat: Gardens, bushy and wooded areas, scrubs, open forest, evergreen forest, moist deciduous forest, plantations, bamboo forest and secondary jungle. Status: Resident. Food: Insects and

fruits. Nesting: February – August, local variations may be found, nest made up of flexible grass and rootlets. It is found in bushy areas or human habitations. Eggs: 2-4, light pink. Both males and females share parental duties. Distribution: Throughout Kerala. Kole wetlands, KFRI campus, Kerala Agricultural University campus, Chimmony Wildlife Sanctuary and Peechi-Vazhani Wildlife Sanctuary.

Order: Passeriformes

Family: Pycnonotidae

117. Species Name: Red-vented Bulbul Pycnonotus cafer (Linnaeus, 1766)

As the name indicates, lower base of the tail is crimson red coloured. Upper portion of the body is brown coloured, which gives a scaly appearance. Head is black, small crest is present on the head. Tail is having white patch at its tip. Lower portion also brown coloured; a white patch on ventral portion. Eyes are reddish. Black bill, leg and brown tail, size is of about 20 cm. Sound is like pit...pit...peekk...white portion is seen on the rump portion and it is visible only during flight. Habit: Pairs or in small flocks. Habitat: Gardens, scrubby areas, mangroves, forests areas, evergreen forest, moist deciduous forest, plantations, bamboo forest, secondary jungle, etc. Status: Resident. Food: Insects, fruits, nectars etc. Nesting: February – May. Local variations also reported. Nest is made up of grassy flexible materials. Eggs: 2-3, pale light. Distribution: Throughout Kerala. Kole wetlands, KFRI campus, Kerala Agricultural University campus, Chimmony Wildlife Sanctuary and Peechi-Vazhani Wildlife Sanctuary.

Order: Passeriformes

Family: Pycnonotidae

118. Species Name: Yellow-browed Bulbul *Iole indica* (Jerdon, 1839)

Yellow browed name indicates the nature of its eye brow; this bird has no crest on its head. Size is of about 2 cm. Upper portion of the body, having dull brownish yellow, but lower portions are light yellow and also bright. The tail is brownish coloured, bill is black and legs are also same coloured. The eyes having a reddish colour and black central part. Sexes are alike. Sound is like double noted preeek.... Habit: Normally pairs or parties. Habitat: It is met in trees, scrubs, thrones, bushes, secondary growth, evergreen forest, moist deciduous forest, plantations, bamboo forest, secondary jungle etc. Status: Resident. Food: Mostly feed on flower, nectar and other parts, but also reported to feed on insects. Nesting: February - May. Nest is made as a thick twiggy pad. Eggs: 2-3, dull white. Distribution: Southern Kerala,

Nilgris, mostly in all the forests of Kerala. Chimmony Wildlife Sanctuary, Peechi-

Vazhani Wildlife Sanctuary and Silent Valley National Park.

Order: Passeriformes

Family: Pycnonotidae

119. Species Name: Black Bulbul Hypsipetes leucocephalus Gmelin, 1776

As the name indicates the head is having a small black crest, the rest of the upper

portion of the body is black coloured, the brown colour on the wing tips and on tail

and the tail have a small fork. The lower portion is ashy white on all parts. The bill

and legs of this bird is red coloured, which is a diagnostic character. The eyes are also

slight reddish natured and the sound is like chrippy preeky etc sexes are alike. Habit:

Normally in parties. Habitat: Met with large broad leaved trees, moist and evergreen

forests, plantations etc. Status: Resident. Food: Fruits, also feed on insects. Nesting:

May – July. Similar to other Bulbuls. Eggs: 2-4, pale pinkish. Distribution:

Throughout the forests of Kerala, Nilgiris etc. Seen in Silent Valley National Park

during summer.

Order: Passeriformes

Family: Irenidae

120. Species Name: Jerdon's Chloropsis Chloropsis cochinchinensis (Gmelin,

1788)

This bird is also known as Blue winged leaf bird; the size may be of about 18-20

cm. It is similar to golden fronted Chloropsis, but can be identified due to the absence

of golden colour on head region. Upper portion of female bird is greenish, having a

purple nature on neck area, the male having same colour, but yellow patch on

forehead. Blue tipped wing are also a distinguishing character of this bird. Male

having black patch on chin, throat and portions. It mostly prefers foliaged trees.

Habit: Pair or parties. Habitat: Wooded areas, open forests, cultivations etc mostly

found in trees, scrub forest, evergreen forest, deciduous, plantations. Status; Resident.

Food: Flower, nectar. Nesting: April – August, nest made up of flexible materials

into the shape of a cup. Local variation of the season also reported. Eggs: 2-3, dull

white. Distribution: Throughout Kerala. Chimmony Wildlife Sanctuary, Peechi-

Vazhani Wildlife Sanctuary and Silent Valley National Park.

Order: Passeriformes

Family: Irenidae

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# 121. Species Name: Gold-fronted Chloropsis *Chloropsis aurifrons* (Temminck, 1829)

Golden fronted leaf bird is the another name of this bird, it has a size of about 19 cm. Male having a golden area on the forehead, chin area has violet colour, surrounding this portion there is a black area. Other portions having grey to green colour, which represents the whole body. Female has grass green coloured body; light violet check portions are also diagnostic. Black edge at the tip of wings is another character of this bird. Bill, eyes and legs are black. Sound of this bird is like seek...see...preed....pikk.. etc. Habit: Pairs or Parties. Habitat: Mostly met in wooded lands, foliage trees, secondary growths, evergreen and deciduous forests, scrub forest, evergreen forest, deciduous, plantations etc. Status: Resident. Food: insects and flower nectars. Nesting: May — August, nest made up of small routs, leaves and materials. Eggs: 2, dull white. Distribution: Throughout Kerala. Chimmony Wildlife Sanctuary and Peechi-Vazhani Wildlife Sanctuary.

Order: Passeriformes

Family: Irenidae

#### 122. Species Name: Asian Fairy-Bluebird Irena puella (Latham, 1790)

Male and female bird shows differences in colouration. The male is having glittering blue colour on head and a portion of upper body, lower and upper tail coverts. Chin, throat, lower body and tails are black coloured. Female bird is having dull bluish black colours on all parts. The tail having a prominent blue. The bill is some what large and black coloured. Eyes are reddish having a black centre. The leg nails are also black. Size of this bird ranges from 25-27 cm and sound is like whitu...preepit...pik...pee etc. Habit: Normally in parties. Habitat: Wooded areas, plantations, evergreen, moist forests etc. and mostly met in trees. Scrub forest, evergreen forest, deciduous, plantations. Status: Resident. Food: Fruits and berries. Nesting: February-April. Nest made up of twigs and softened with grasses. Eggs: 2 grey. Distribution: Throughout Kerala. Chimmony Wildlife Sanctuary and Peechi-Vazhani Wildlife Sanctuary.

Order: Passeriformes

Family: Turdinae

#### 123. Species Name: Blue Rock-Thrush Monticola solitarius (Linnaeus, 1758)

Male and female bird shows difference in the colour pattern, by which they can be easily identified. Male is having light bluish colour all over the body; wings having a

black patch and tail part also has black area. Eyes, beak, legs are in black colour. Female bird having chocolate brown coloured upper parts, lower portions having number of brown or yellow spots. This bird having a size of about 20-23 cm, it is a ground bird. Habit: Single. Habitat: Rocky areas, buildings, cliffs of rocks, abandoned buildings etc. Status: Winter visitor. Food: Insects and fruits. Nesting: April – June, nest is made up of grass, which is found in and around its habitat. Eggs: 3-5, light blue. Distribution: Throughout Kerala.

Order: Passeriformes

Family: Turdinae

# 124. Species Name: Orange-headed Thrush Zoothera citrina (Latham, 1790)

White throated ground thrush, Orange headed ground thrush are other names of this bird. White portion on throat is seen only in another race 'Cyanotus'. Head, neck, chin, throat, lower parts are chestnut brown coloured. Upper body, wings are ash coloured. Small dull white patch on the side of the wings is also diagnostic. Lower tail coverts are white coloured. The legs are having a reddish brown colour. Eye having a slight reddish colour, beak is somewhat large and black. Small hair like growths is seen on the base of the beak. Kra..Kree.. sound is produced by this bird. Habit: Single or pairs. Habitat: Wooded lands, evergreen and moist deciduous forests. Status: Resident with migratory populations. Food: worms, insects, fruits. Nesting: May – June. Nest made up of root like materials and is found in trees. Eggs: 3-4. Distribution: Throughout Kerala. Chimmony Wildlife Sanctuary, Peechi- Vazhani Wildlife Sanctuary and Silent Valley National Park.

Order: Passeriformes

Family: Turdinae

#### 125. Species Name: Oriental Magpie Robin Copsychus saularis (Linnaeus, 1758)

This bird has a size of about 20 cm, a black and white ground bird. The male having black colour all over the body, lower tail coverts and abdomen are replaced by white colour. A white wing patch is another diagnostic character, which is present on the upper portion of the wings. Female is having a dull colouration compared to male. Black bill and eyes are also notable. The legs are having an ashy colour. Call is a musical type saee...se...sick...sick... Habitat: Single or Pairs. Habitat: Forest, estuaries, beach areas, gardens, found among human habitations. Status: Resident. Food: Insects and flower nectar. Nesting: April – July, nest made

up of rootlets, grass, found in buildings, trees etc. Eggs: 3-5, a composition of blue

and green colours. Distribution: Throughout Kerala.

Order: P#sseriformes

Family: Turdinae

126. Species Name: Indian Robin Saxicoloides fulicata (Linnaeus, 1776)

Size of this bird may be of about 15-19 cm, male and female can be identified due

to difference in their colour pattern. Male bird is black on upper portions, lower chin,

throat and abdominal portions. Under tail coverts are having a chestnut colouration. A

white patch on the wing is more prominent. Female is having a brown colouration all

over the body and it does not have patches on the wing. Lower tail coverts are

chestnut coloured. Beak, legs and eye are black. Small hair like out growths is found

on the base of beak of both birds. Habit: Pairs. Habitat: Scrubby lands, bushes,

estuarine beaches, stony areas, dry deciduous, semi evergreen, scrub jungle, grass

covered hillsides etc. Status: Resident. Food: Insectivorous. Nesting: April - June,

nest made up of roots and grassy materials. It may be found on ground or on trees.

Eggs: 2-3, dull white. Distribution: Throughout Kerala.

Order: Passeriformes

Family: Timaliinae

127. Species Name: Indian Rufous Babbler Turdoides subrufus (Jerdon, 1839)

This bitd is also known as Rufous Babbler, with a medium size of about 25 cm.

The upper portion of the body is grey coloured, which is equally distributed in head

and rest of the body. Neck area having a rust colour on upper parts. Lower portion of

the body including chin, throat and abdominal parts are rufous coloured. The bill is

dark brown at upper and light yellowish at lower parts. Small hairs like out growths

are found on the base of the beak. Eyes are having a slight greenish yellow nature, the

legs are in same colour that of the lower body. Sound is like tree...tree... which may

resemble the sound of Wayanad Laughing thrush. Habit: Normally in flocks.

Habitat: Scrubs, humus filled lands, bamboo forests, moist deciduous forest, cultivation areas, plantations, bamboo forest etc. Status: Resident. Food: Nectar,

insects, fruits etc. Nesting: February - May. Nest made up of grassy and leafy

materials in scrubs. Eggs: 4, blue coloured. Distribution: Palghat gap, throughout

Kerala.

Order: Passeriformes

Family: Timaliinae

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#### 128. Species Name: Jungle Babbler Turdoides striatus Jerdon, 1823

This babbler has a size of about 25 cm and it has earth brown colour. The colour has dark nature on wings and at the end of the tips. Lower portion has a dull nature. Small hairs like out growths are seen at the base of the beak. The bill is yellow, much duller coloured legs. Eyes are greenish coloured, with black portion at the centre. Sound is like kee...kek.. Sexes are alike. There are several races ant it may vary in colourations. Habit: Flocks. Habitat: Humus filled lands, gardens, cultivated lands, and deciduous forests. Status: Resident. Food: Insects, flowers etc. Nesting: Almost throughout a year, nest made of grassy materials leafy bushes. Nest parasitized by other birds. Eggs: 3-4 blue. Both share parental duties. Distribution: Throughout Kerala.

Order: Passeriformes

Family: Timaliinae

# 129. Species Name: White-headed Babbler Turdoides affinis (Jerdon, 1847)

Grey coloured upper body, which has more dark at tips. Lower portions of the chin, throat and neck are also same coloured. Cream colouration can be seen on the crown, lower portion of the upper neck. Lower portion like abdominal areas are also cream coloured. Tail having dull nature at its base and darker at its ends. Beak is yellowish, having hair like out growths at the base. Eyes are greenish, legs are also yellow coloured. Sound is like trr...rii.... It may confuse with jungle Babbler but by colouration it can be identified. This bird is also known as yellow billed babbler. Habit: Flocks. Habitat: Gardens, scrubs, cultivations, moist deciduous forest, cultivation areas, plantations, bamboo forest etc. Status: Resident. Nesting: Made up of leaves and other flexible materials. Nest mostly found in scrubs. Other birds parasite on its nest. Eggs: 3-4, blue. Both share parental duties. Lead a communal life by caring offspring. Distribution: Throughout Kerala. Kole wetlands, KFRI campus, Chimmony Wildlife Sanctuary and Peechi-Vazhani Wildlife Sanctuary.

Order: Passeriformes

Family: Sylviinae

## 130. Species Name: Common Tailorbird Orthotomus sutorius Pennant, 1769

Small bird with a size of about 13 cm. Olive green upper body with rust coloured head and lower body parts are white. The tail is long and pointed and the length is large when compared to male and it is seen during breeding season. Beak is brown, and the colour of the eye is similar to the colour of the head and legs have slight

yellowish brown colour. Tail may some time see upright. Sound is another character, towit...pretty.... sound is produced. Sexes are alike. Habit: Solitary or pairs. Habitat: Scrubby thorny areas, gardens, sometime seen with human habitations, tall grass and reed beds along the margins of tanks, lagoons, tidal creeks, paddy fields, dry grasslands etc. Status: Resident. Nesting: April – September. Nest found in medium sized plants, nest is made up of flexible materials. Eggs: 3-4, slight bluish. Distribution: Throughout Kerala. Kole wetlands, KFRI campus, Chimmony Wildlife Sanctuary and Peechi-Vazhani Wildlife Sanctuary.

Order: Passeriformes

Family: Muscicapinae

# 131. Species Name: Black and Orange Flycatcher *Ficedula nigrorufa* (Jerdon, 1839)

Blue and rufous flycatcher is another name of this bird and male and female birds have slight differences in the colour pattern. Size may be of about 11 cm. As the name indicates the bird is having combination of black and orange colourations. Head of male bird is dark black and the whole body is orange rufous coloured, the wings having black colourations. Female bird is having a dull greyish head; the rufous colour on the body parts is duller when compared to male bird. The wings having black colouration. Small out growths are found on the base of the bill and it is dull, in females. Pale ring around the eyes of female also diagnostic. Beak, eyes, legs are black. Chec...rriri..tui...tui... chrr...chit etc. Habit: Single or pairs. Habitat: Bushy areas, bamboo forests, evergreen forest, plantations, sholas etc. Status: Resident. Food: Insects. Nesting: April – June. Nest made up of bamboo and other such leaves. Nest is found in the bushes. Eggs: 2, greyish colours. Distribution: Throughout Kerala. Grasslands in high altitudes and Wayanad.

Order: Passeriformes

Family: Muscicapinae

#### 132. Species Name: Verditer Flycatcher Eumylas thalassina (Swainson, 1838)

Size of about 15-16 cm and male and female birds show difference in their colour pattern. The male bird is greenish blue at its upper side and the blue colouration is seen on upper area. Tip of the wings are black coloured. Lower portions of the body having more greenish nature. The female bird is greenish in its colouration. The greenish colouration can be observed on the upper body parts. Lower parts such as chin, throat having greyer colouration. There is a black area at the base of the bill;

moreover there is hair like feather at this region. The eyes, bill, legs are dark black. Tze...uu...u.. like sound is produced. Habit: Solitary. Habitat: Wooded lands, gardens, rivers, open forest etc. Status: Winter visitor. Food: Insects. Nesting: April - July. Nest made up of fibre materials and it is found in holes and other similar areas.

Eggs: 4, pale rosy coloured. Both parents share parental duties. Distribution: Throughout Kerala.

Order: Passeriformes

Family: Nectariniidae

#### 133. Species Name: Small Sunbird Nectarinia minima (Sykes, 1832)

Size may be of about 8 cm. Male bird is having brownish crimson colour at the upper body, which is also having a glistening nature. Slight bluish glistening areas can be seen on the chin and rump portions. Tail is also similar to body as short and stumpy. Yellow breast and a part of throat is white, lower tail coverts also the same. Female is purple sunbird with grey nature, lower part having yellowish nature. Black super cilium, bill black and down curved, black eyes and legs. Sound is like titiyou....tityu... siseee.... Habit: Pairs. Habitat: Wooded areas, plantations, scrubs, moist deciduous forest, semi evergreen forest, cultivation areas, orchards, groves, flowering or fruiting trees etc Status: Resident. Food: Nectar. Nesting: Nest made up of grassy materials and it has found on bushes. Eggs: 2-3, like purple sunbird. Nesting duties by female and feeding by male but female has a role in it. Distribution: Throughout Kerala.

Order: Passeriformes

Family: Dicaeidae

# 134. Species Name: Purple-rumped Sunbird Nectarinia zeylonica (Linnaeus, 1766)

Crimson backed sunbird is another name of this bird. Male and female bird is well marked in colouration. Male similar to purple sun bird with greenish head, neck and upper body is purple brownish coloured and similar colour is seen on breast. Rump portion and chin, throat, are metallic bluish coloured. Lower body parts are metallic bluish coloured. Lower body parts are yellowish. Black portion can be seen on wings and tail. Female bird is almost similar to purple sunbird and upper body is olive grey coloured. Female is having a purple rump. The rump portion is metallic purplish coloured during breeding season in male. Chin is dull grey white and rest of the lower portion is yellow. The name also gives hint about the bird's colourations. Sound is

like siswee....whi...se etc. Bill is bluish, down curved black leg, eyes etc. Similar to Purple sunbird, smaller than that. Habit: Normally seen in pairs. Sometime mixed to other birds. Habitat: Wooded lands, gardens, secondary growth, scrub, plantations, moist deciduous forest, semi evergreen forest, cultivation areas, orchards, groves, flowering or fruiting trees. Status: Resident. Food: Nectar, small insects. Nesting: December - April. Nest made up of grassy and fine materials. It is hanging from bushy vegetation. Eggs: 2, White red spots are found. Distribution: Throughout Kerala. Kole wetlands, KFRI campus, Chimmony Wildlife Sanctuary and Peechi-Vazhani Wildlife Sanctuary.

Order: Passeriformes

Family: Nectariniidae

## 135. Species Name: Purple Sunbird Nectarinia asiatica Latham, 1790

Size may be of about 9-10 cm. Upper body of male is bluish metallic coloured and wings having dark parts. Chin and throat are also bluish and rest of the portion are black during breeding plumage. Female bird has olive brown upper body, dark patch behind the eye and lower parts are yellowish. Non breeding males also have similar colourations, but dark black area is below the under parts. Eyes, bill, legs are black. The bill is long sharp tipped and down curved; this is an adaptation for its mode of feeding. Sound is like wich...cheewit...wichee...etc. Habit: Single or pairs. Habitat: Deciduous forest, plantations, gardens, scrubs, orchards, moist deciduous forest, semi evergreen forest, cultivation areas, orchards, groves, flowering or fruiting trees. Status: Resident. Food: Nectar, small insects. Nesting: March – May. Nest made up of grassy materials. Eggs: 2-3, grey or green composition. Distribution: Throughout Kerala. Kole wetlands, KFRI campus, Chimmony Wildlife Sanctuary and Peechi-Vazhani Wildlife Sanctuary.

Order: Passeriformes

Family: Nectariniidae

## 136. Species Name: Loten's Sunbird Nectarinia lotenia (Linnaeus, 1766)

This is a long billed sunbird. Maroon breasted sun bird is another name for this bird. Male and female bird differs in their colouration. Male has metallic greenish above and wings have purple green. Tail is shortened and stumpy, bluish chin, throat alight brownish area on arm pit is diagnostic. Lower area is blackish brown. Female bird is olive brown above pale, super cilium and lower body parts are yellowish. Non breeding male is similar to female, but having a black band at below parts. The bill is

very long, sharp and down curved and it is a distinguishing character to this bird. Eyes and legs are black. Sound is like chit...cheewit...etc. **Habit:** Single or pairs. **Habitat:** Gardens, scrub, towers, wooded areas, moist deciduous forest, semi evergreen forest, cultivation areas, orchards, groves, flowering or fruiting trees etc. **Status;** Resident. **Food:** Nectar, small insects. **Nesting:** March – May, nest made up of fibery materials. **Eggs:** 2, dull white. Nesting duties carried by female alone. The female and male feed the young ones, but male alone have a prominent part in it. **Distribution:** Throughout Kerala. Kole wetlands, KFRI campus, Chimmony Wildlife Sanctuary and Peechi-Vazhani Wildlife Sanctuary.

Order: Passeriformes

Family: Nectariniidae

#### 137. Species Name: Little Spiderhunter Arachnothera longirostra (Latham, 1790)

Sexes are alike and the size may be of about 14-16 cm. Head has black area, upper body is olive brownish. Lower portion like chin, throat are dull white, greyish. Rest of the lower portions are yellowish. Wings having paler colouration at its tips. The tail is very short, stumpy and slight white area may see on the tip. The bill is very long, sharp and down curved and it is black, the eyes and legs are also same coloured. The sound is harsh and it is like flycatchers with...chek...chek...etc. Habit; Single or pairs. Habitat: Plantations, banana cultivations, moist deciduous forest, semi evergreen forest, orchards, groves, flowering or fruiting trees etc. Status; Resident. Food: Spiders, nectars etc. Nesting: March – September. Nest is made up of grassy materials etc. Eggs: 2, rosy white. Both have parental duties. Distribution: Throughout Kerala. Chimmony Wildlife Sanctuary, Peechi-Vazhani Wildlife Sanctuary.

Order: Passeriformes

Family: Estrildinae

#### 138. Species Name: Red Munia Amandava amandava (Linnaeus, 1758)

Red avadavat is another name of this bird, with a size of about 10 cm. Male show variations in colouration during breeding and non breeding season. During non breeding plumage male has brownish colour on upper side, reddish crimson can also be seen all over the body. White spots are also seen on the body, during breeding season with crimson beak. Female bird is almost similar to non breeding male, rump portion having slight reddish colour. Legs reddish and black eyes. Musical sound pink..pink.. etc... Habit: Parties. Habitat: Damp, moist areas, paddy fields, reed

beds, cultivation, grassland, deciduous forest, orchards, groves etc. Status: Resident.

Food: Seeds. Nesting: June - October. Nest made up of grassy materials; normally it

is seen in bushes. Eggs: 4-7, white both have domestic duties. Distribution:

Throughout Kerala. Kole wetlands and Peechi- Vazhani Wildlife Sanctuary.

Order: Passeriformes

Family: Estrildinae

139. Species Name: Spotted Munia Lonchura punctulata (Linnaeus, 1758)

Scaly breasted munia is another name of this bird. This bird shows variation in

colour pattern during breeding and non breeding season. During non breeding season

brown coloured all over the body and black spot not seen on lower parts. During

breeding season, the body colouration is brown coloured, it has a chocolaty nature.

Tail and wing tips are dark areas. Lower portion is white coloured, but which has

black spots distributed. The beak is conical. Sexes are alike. The sound is like

peet...peet... and chirrupy sounds. Habit: Flocks. Habitat: Scrubs, bushes, grounds,

cultivations, grassland, deciduous forest, orchards, groves etc. Status: Resident.

Food: Seeds. Nesting: July - October. Nest made up of grass. Eggs: 4-8, white. Both

have all type of duties. Distribution: Throughout Kerala. Kole wetlands, Kerala

Agricultural University campus and Peechi-Vazhani Wildlife Sanctuary.

Order: Passeriformes

Family: Estrildinae

140. Species Name: Black-headed Munia Lonchura malacca (Linnaeus, 1766)

Size may be of about 10-11 cm, as the name indicates the head of the bird is black.

Upper body is completely chocolaty rufous brown colour. The colouration is

completely distributed, through out the body. Lower portion has a white area, which

slowly nartows to tail coverts. Sexes are alike. The legs are black, eye are also dark

black. The beak is an identifiable character to this bird, it is ashy black, heavy conical

one. Sound is like very flexible. Habit: Flocks. Habitat: Wet areas, (partially wet

areas), estuarine lands, grass lands, cultivation areas, deciduous forest, orchards,

groves. Status: Resident. Food: Similar to other munias. Nesting: June - October.

Made up of grass and found in bushes. Eggs: 5-7, white. Distribution: Throughout

Kerala. Kole wetlands.

Order: Passeriformes

Family: Ploceinae

141. Specles Name: Baya Weaver Ploceus philippinus (Linnaeus, 1766)

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It is also known as Common Weaver bird which has a size of about 15 cm. Male and female during breeding season, shows similarity to female house sparrow. Brown coloured body is having a number of streaks. During breeding season, male bird has vellow colour at the crown, throat and breast. Cheeks are black in colour; lower portion of the body is white. Upper portions having brown and slight yellow streaks. Female bird is brown at the breast portion and also in the upper areas. The bill is a conical one and it has large eyes, the legs are having pinkish colour. Sound is like chit...chee..ee.. Habit: Flocks. Habitat: Cultivated lands, palms, lake sides, grass lands, deciduous forest, orchards, groves etc. Status: Resident. Food: Seeds and grass. **Nesting:** May – September. Nest made as a hanging structure from leaf sheaths and it is made up of stiff grass, the entrance is long tube. Nest made by male and incubation by female and male has several female partners in a season. Mostly the nests are found in palms. Eggs: 2-4, white. Distribution: Throughout Kerala. Kole wetlands.

Order: Passeriformes

Family: Sturnidae

142. Species Name: Common Myna Acridotheres tristis (Linnaeus, 1766)

Chocolate brown colouration is found on upper body and the same is also found on lower abdominal area and on edges of wings. Wing has a whitish colour, which is closely seen while the bird is at flight. Lower tail coverts are white, tail is black with margins of white. Brownish eye with yellow markings just behind it. The bill is yellow coloured and the sound is like radiu ... radiu... keek... kreek... Habit: Small parties or pairs. Habitat: Found close to human habitations, estuaries, forest, dry and coastal areas, deciduous forest, scrub jungle, neighbourhood of cultivation, human habitations, gardens, groves etc. Status: Resident. Food: Insects, fruits and omnivorous. Nesting: April - August. Nest made up of twigs, it also uses holes in the tree. Eggs: 4-5, bluish. Both share all duties. Distribution: Throughout Kerala. Kole wetlands, KFRI campus, Kerala Agricultural University campus, Chimmony Wildlife Sanctuary and Peechi- Vazhani Wildlife Sanctuary. Roost in public places along with crow.

Order: Passeriformes

Family: Sturnidae

143. Species Name: Jungle Myna Acridotheres fuscus (Wagler, 1827)

Similar to Common Myna but the colouration is grey on all parts. The colour pattern is distributed all over the body. The bush like feathers on head and absence of yellow area near the eye are diagnostic character of this bird. The bill is having brownish yellow colouration and wings have a white patch. Tail is black with white lines around the tail. Eyes have slight greenish colouration and legs are brownish yellow coloured. Sound is almost similar to common myna. Habit: Pairs or parties. Habitat: Not found associated with human habitations. Found in cultivated lands, wooded areas, gardens, estuaries, dry and coastal areas, deciduous forest, scrub jungle, neighbourhood of cultivation, groves etc. Status: Resident. Food: Insects, nectar, fruits. Omnivorous. Nesting: February – July. Twigs and grass fitted to tree holes. Eggs: 3-4, bluish. Distribution: Throughout Kerala.

Order: Passeriformes

Family: Oriolidae

#### 144. Species Name: Black-naped Oriole Oriolus chinensis (Linnaeus, 1766)

Similar to Eurasian Golden Oriole, size may be of about 25-27 cm. Upper portion of body having yellowish colour, which may have ash tinge on lower portions. Wings have black markings on edges, tail is black at upper side and its side having yellow lines. Female bird is having similar colourations but it is greener in its composition. Black coloured patch from the eyes extend and combine on the nape area, which is a diagnostic character. Bill is sharply pointed and pink reddish eyes and ashy legs. Sound is like chuck...wheeeow... etc. Habit: Solitary or pairs. Habitat: Found in trees, wooded areas, forest, deciduous forests, semi evergreen forest, gardens, groves, orchards etc. Status: Winter visitor. Food: Insects, fruits etc. Nesting: April – July. Similar to Orioles. Eggs: 2-3. Distribution: Throughout Kerala. Chimmony Wildlife Sanctuary and Peechi-Vazhani Wildlife Sanctuary.

Order: Passeriformes

Family: Oriolidae

#### 145. Species Name: Black-headed Oriole Oriolus xanthornus (Linnaeus, 1758)

As the name indicates the head of this bird is dark black. Rest of the body is yellow coloured and same colouration is found on the upper side of the body, but has black patches and markings on edges of the wings, shoulder parts etc. The tail is having a dark black patch, tip and base of the tail is yellow. Female bird has a duller head colour and it also has yellow area on head. Eyes are reddish; bill is slightly down curved and pinkish. The legs are ash coloured. Sound is kwak....pronik....etc. Habit:

Single or pairs. **Habitat:** Forests, wooded lands, gardens, deciduous forests, semi evergreen forest, groves, orchards. **Status:** Resident. **Food:** Fruits, insects etc. **Nesting:** April – July. Nest similar to other orioles. **Eggs:** Slight pinkish. **Distribution:** Throughout Kerala. Kole wetlands, KFRI campus, Chimmony Wildlife Sanctuary and Peechi-Vazhani Wildlife Sanctuary.

Order: Passeriformes

Family: Dicruridae

#### 146. Species Name: Black Drongo Dicrurus macrocercus Vieillot, 1817

Size may be of about 28-32 cm, black bird with a glistening appearance. The colouration is completely distributed all over the body. There is a very minute white dot at the base of the bill, which is a diagnostic character to this bird. The tail is long and it is deeply forked. Eyes, legs are dark black. Slight bush like feathers at the base of the bill. Sexes are alike. Sound is like harsh tone pree....preeweek... some time resembles the call of shikra. **Habit:** Solitary. **Habitat:** Open country, cultivated lands, around human habitations, scrubs, deciduous forests, gardens, groves, orchards, neighbourhood of human habitations etc. **Status:** Resident. **Food:** Insects, flower nectar etc. **Nesting:** April – August. Nest made up of twigs and similar materials, nest is found in trees. **Eggs:** 3-5 white, both share all domestic duties. **Distribution:** Throughout Kerala. Kole wetlands, KFRI campus, Kerala Agricultural University campus, Chimmony Wildlife Sanctuary and Peechi-Vazhani Wildlife Sanctuary. The bird is usually found catching insects in street lights even up to late evening.

Order: Passeriformes

Family: Dicruridae

# 147. Species Name: Greater Racket-tailed Drongo *Dicrurus paradiseus* (Linnaeus, 1766)

Glittering black drongo, the colouration is, completely distributed all over the body, side of the wings have small green nature. The black tail is long and it is slightly forked, which has two long wire extensions and at the ends have a twisted feathers. Bush like feathers can be seen on the base of the bill, which is larger when compared to other birds. Bill is heavy and it has hair like feathers at the base. Eyes are crimson red with a black central area and legs are black coloured. Sound is like other birds and it is a well known mimic. Habit: Small parties or pairs. Habitat: Forest, scrubs, bamboo lands, moist deciduous forests, plantations etc. Status: Resident. Food: Insects and flower nectar. Nesting: March- June. Similar to other Drongos.

Eggs: 3-4, dull white. **Distribution:** Western Ghats up to 1500 m, throughout Kerala. Chimmony Wildlife Sanctuary and Peechi- Vazhani Wildlife Sanctuary. Good in mimicking the sound of other birds.

Order: Passeriformes

Family: Corvidae

148. Species Name: Indian Tree Pie Dendrocitta vagabunda (Latham, 1790)

Rufous tree pie is another name of this bird, 25-50 cm in size. Head is black, mixed red coloured; this will give dull appearance to the head of this bird. Upper body, breast areas and lower parts are rufous or chestnut mixed yellow coloured. Black and white areas can be seen on the wings of this bird. The tail is long which has black sides and grey middle portion, then pure white and black tipped. The eyes are crimson red coloured, beak is down curved and black. The legs are also the same. Sexes are alike. Sound is like bob...o...ka...ka...we..ru...ni a harsh voice. Habit: Single or pairs. Habitat: Forest, human habitations, scrubs, gardens, estates, deciduous forests, gardens, groves, orchards, cultivation areas etc. Status: Resident. Food: Insects, fruits and other food. It is an omnivorous feeder. Nesting: March – May. Nest made up of twigs and thorny materials. It is softened with grass like materials. Eggs: 4-5, pale dull white, both have parental duties. Distribution: Throughout Kerala. Kole wetlands, KFRI campus, Chimmony Wildlife Sanctuary, Peechi-Vazhani Wildlife Sanctuary. Solitary birds are seen in the coconut orchards and home gardens where they will look for prey inside the coconut leaves.

Order: Passeriformes

Family: Corvidae

149. Species Name: White bellied Tree Pie Dendrocitta leucogastra Gould, 1833

Almost similar to Indian tree pie and size may be of about 50 cm. Distinguished from former by white portions on hind neck, breast lower belly etc. The head is black, chin also same coloured and the wings and upper body are chestnut coloured. Wings having white patch and it is black coloured. Lower tail coverts are chestnut coloured. The tail is long and it has white colour up to middle and lower portions has grey coloured. Down curved black beak crimson red coloured eye, legs are also black. Sound is koyn...koyn...chuff.... chuff... etc. Habit: Pairs or parties. Habitat: Forest, hilly lands, deciduous forest etc. Status: Resident. Food: Similar to Indian tree pie. Nesting: February – April. Similar to Indian tree pie. Eggs: 4-5, white with

various mixings. Distribution: Endemic to Kerala up to 1500m. Throughout forest of

Kerala. Highly visible in the Sairandri area of Silent Valley National Park.

Order: Passeriformes

Family: Corvidae

150. Species Name: House Crow Corvus splendens Vieillot, 1817

Size may be of about 10-16 cm, black coloured bird; the colour pattern is completely distributed all over the body, which is black. The duller, grey areas on neck and breasts area are diagnostic to this bird. Head portion has more dark black and the bill is pointed black. The legs and eyes are also black. The sound is like ka...ka... and more harsh sounds. Sexes are alike. Koel laid egg in its nest. Habit: Solitary or pairs. Habitat: Almost close to human habitations, marshy lands, gardens, city, forests, groves, orchards, cultivation areas etc. Status: Resident. Food: Omnivorous feeders and it feed on vegetable matter, kitchen waste and almost all materials. Nesting: April – June. Nest made up of twigs, softened with coir and grass. Eggs: 4-5, dull bluish green. Both sexes participate in nesting, incubating and parental care duties. Distribution: Throughout Kerala. Kole wetlands, KFRI campus, Kerala Agricultural University campus, Chimmony Wildlife Sanctuary and Peechi-Vazhani Wildlife Sanctuary. A bird highly associated with humans in Kerala.

Order: Passeriformes

Family: Corvidae

151. Species Name: Jungle Crow Corvus macrorhynchos Wagler, 1827

Large bellied crow is another name of this bird and it has a size of about 48-50 cm. Glittering black bird, the colouration is completely distributed all over the body. The bill is black and it is heavy and the eye, legs are also black. It has no grey parts on its body. Sound is like crow...crow. Habit: Pairs or parties. Habitat: Human habitations, scrubs, grass lands, parks, city, deciduous forests, gardens, groves, orchards, cultivation areas etc. Status: Resident. Food: Similar to House crow and it also feeds on carrion. Nesting: December - April. Nest similar to House crow. Nest predated by Koel, both have parental duties. Eggs: Similar to House crow, but it is smaller in its size. Distribution: Throughout Kerala. Kole wetlands, KFRI campus, Chimmony Wildlife Sanctuary and Peechi-Vazhani Wildlife Sanctuary.

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#### References

- Ali, S. 1969. The Birds of Kerala. Oxford University Press, Bombay, 444 p.
- Ali, S. 2002. The Book of Indian Birds. Bombay Natural History Society, 326 P.
- Ali, S., Ripley, S.D. 1983. A Pictorial Guide to the Birds of the Indian subcontinent, Oxford University Press, Bombay, 177 p.
- Kannan, V. and R. Manakadan 2005. The status and distribution of Spotbilled Pelican

  \*Pelecanus Philippensis\* in Southern India. Forktail 21: 9-14
- Neelakantan, K.K 1986. **Keralathile Pakshikal** (Malayalam), Kerala Sahithya Academy, Trichur, 527 p.
- Sasikumar, C.; Jaffer Palot and C. Radhakrishnan 2005. Waders of Kerala,
  Zoological Survey of India. 150 p.
- Somasundaram, S. and L. Vijayan 2010. Foraging ecology of globally threatened Nilgiri wood Pigeon in the Western Ghats, India, *Chinese Birds* 1 (1): 9-21.
- Unnikrishnan, N., Shibi Moses and B. Sreekumar 2010. Vembanad "Neer Pakshikal" Kerala Forest Department and Kottayam Nature Society. 153 p.



a. Little grebe (Tachybaptus ruficollis)



b. Little cormorant (Phalacrocorax niger)



c. Darter or Snake bird (Anhinga melanogaster)



d. Little egret (Egretta garzetta)



e. Large egret (Casmerodius albus)



f. Median egret (Mesophoyx intermedia)



a. Cattle egret (Bubulcus ibis)



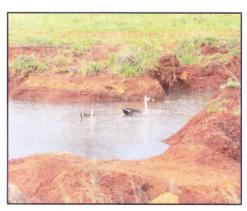
b. Cattle egret in the paddy field



c. Asian openbill stork (Anastomus oscitans)



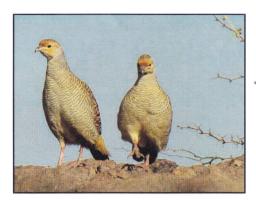
d. Comb duck (Sarkidiornis melanotos)



e. Spot-billed duck (Anas poecilorhyncha)



f. Brahminy kite (*Haliastur indus*)



a. Grey francolin (Francolinus pondicerianus)



b. Red spur fowl ( $Galloperdix\ spadicea$ )



c. Whitebreasted waterhen (Amaurornis phoenicurus)



d. Pheasant-tailed jacana (*Hydrophasianus chirurgus*)



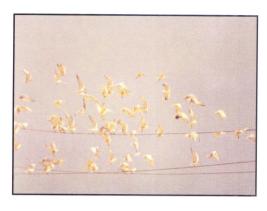
e. Bronze-winged jacana (*Metopidius indicus*)



f. Water cock (Gallicrex cinerea)



a. Common moorhen (Gallinula chloropus)



b. Whiskered tern (Chlidonias hybridus)



c. Alexandrine parakeet (*Psittacula eupatria*)



d. Indian hanging parrot (Loriculus vernalis)



e. Emerald dove (Chalcophaps indica)



f. Mottled wood owl (Strix ocellata)



a. Jungle owlet (Glaucidium radiatum)



b. Spotted owlet (Athene brama)



c. Indian scops owl (Otus bakkamoena)



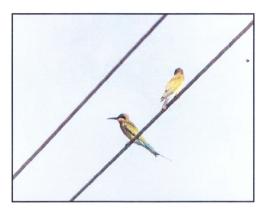
d. Small blue kingfisher (Alcedo atthis)



e. Strok-billed kingerfisher (*Halcyon capensis*)



f. Lesser pied kingfisher (Ceryle rudis)



a. Bluetailed bee eater (Merops philippinus)



b. Common hoopoe (Upupa epops)



c. Red-whiskered bulbul (*Pycnonotus jocosus*)



d. Yellow-browed bulbul (*Iole indica*)



e. Oriental magpie robin (Copsychus saularis)



f. Common myna (Acridotheres tristis)



a. Black-naped oriole (Oriolus chinensis)



b. Greater racket-tailed drongo (*Dicrurus paradiseus*)



c. Jungle crow (Corvus macrorhynchos)