

A FIELD GUIDE TO FAUNAL DIVERSITY OF INDIAN INSTITUTE OF REMOTE SENSING DEHRADUN



CONTRIBUTORS

***Anam Ahsan
D.P. Srivastava
Nupur Rautela***

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PREFACE

This book is an effort to give a quick reference and a convenient broad description about the faunal diversity of Indian Institute of Remote Sensing, Dehradun. The guide provides the most essential and convenient method for the identification of all the species present in the campus. It should help the viewers and the bird watchers to identify all the faunal species to further the conservation of the threatened species.

We tried to cover the diverse variety of life forms in and around the campus. This fieldwork will certainly lead to major advances in the glory of IIRS campus for further research ideas related to wildlife and remote sensing. For further details one can refer the books given in reference. The content is a compilation from various publications and the content of this field guide can be freely reproduced for educational purpose by providing an acknowledgement.

ACKNOWLEDGEMENT

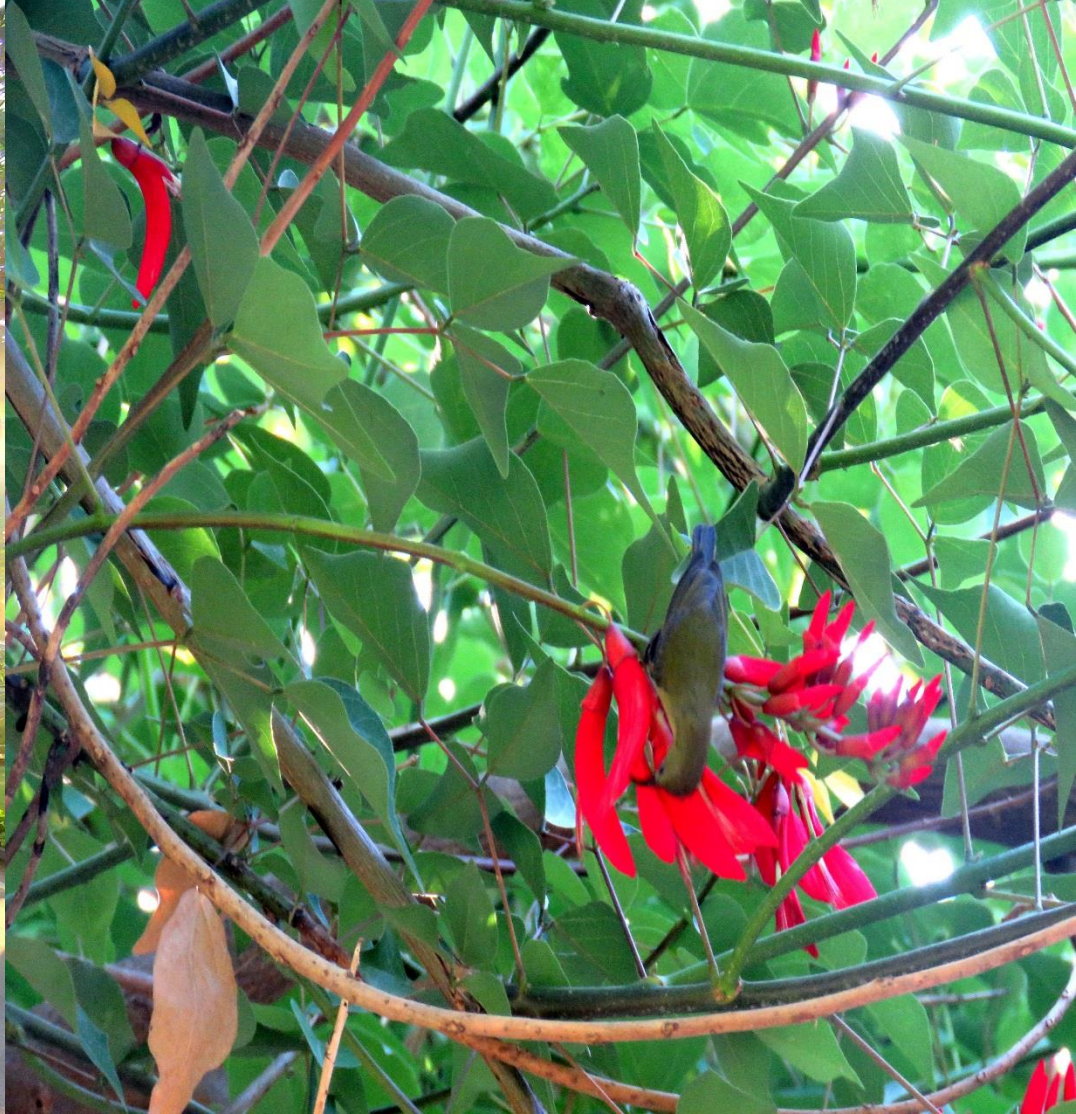
It is our honour to place our gratitude to Mr. Alur Seelin Kiran Kumar, Chairman, Space Commission and Chairman, Indian Space Research Organization (ISRO). We acknowledge our appreciation towards Dr. Senthil Kumar, Director Indian Institute of Remote Sensing (IIRS), Dehradun for successfully organising the world environment day in the campus.

We are thankful to Dr. Sarnam Singh, Dean Academics, Group Director, Earth Resources & System Studies Group & Head, Forestry & Ecology Department, Dr. Arijit Roy, Dr. Subrata Nandy, Dr. Harendra Padalia and Dr. Stutee Gupta faculty Forestry and Ecology Department (FED), IIRS, Dehradun, for their valuable motivation and provision during the compilation of this guide.

We are glad to acknowledge Aimon Bushra, a nature enthusiast and an M.Tech Student from (FED) IIRS who shared her checklist, thesis and photographs for bird section to enhance this work. We use this occasion to express our appreciation to Tapan Adhikari PG Diploma students from FED for their support.

INDIAN INSTITUTE OF REMOTE SENSING

Indian Institute of Remote Sensing (IIRS) under Indian Space Research Organization, Department of Space, Govt. of India is a premier Training and Educational Institute set up for developing trained professionals in the field of Remote Sensing, Geoinformatics and GPS Technology for Natural Resources, Environmental and Disaster Management. It functions as a constituent Unit of Indian Space Research Organization (ISRO), Department of Space, Government of India. Formerly known as Indian Photo-interpretation Institute (IPI), founded in 1966, the Institute boasts to be the first of its kind in entire South-East Asia. While nurturing its primary endeavor to build capacity among the user community by training mid-career professionals, the Institute has enhanced its capability and evolved many training & education programmes that are tuned to meet the requirements of various target groups, ranging from fresh graduates to policy makers including academia. The Institute campus also houses the headquarters of the Centre for Space Science and Technology Education in Asia and The Pacific (CSSTEAP), affiliated to the United Nations and first of its kind established in the region in 1995. IIRS provides support to conduct all its remote sensing and GIS training & education programmes at postgraduate level. The headquarters of Indian Society of Remote Sensing (ISRS), the largest non-governmental scientific society in the country, is also located in the Institute campus.



BIRDS



Aimon Bushra



DP Srivastava

Black Kite (*Milvus migrans*)

FAMILY- Accipitridae

It is one of the most common birds of prey seen near urban settlements. They can be seen scavenging on the urban waste dumping sites outnumbering crows and other scavengers. In IIRS campus they can be seen hovering in sky occasionally coming down to catch small reptiles or mocked by Skira & crows. It can be easily recognized by fork tail cut in tail and yellow cere.

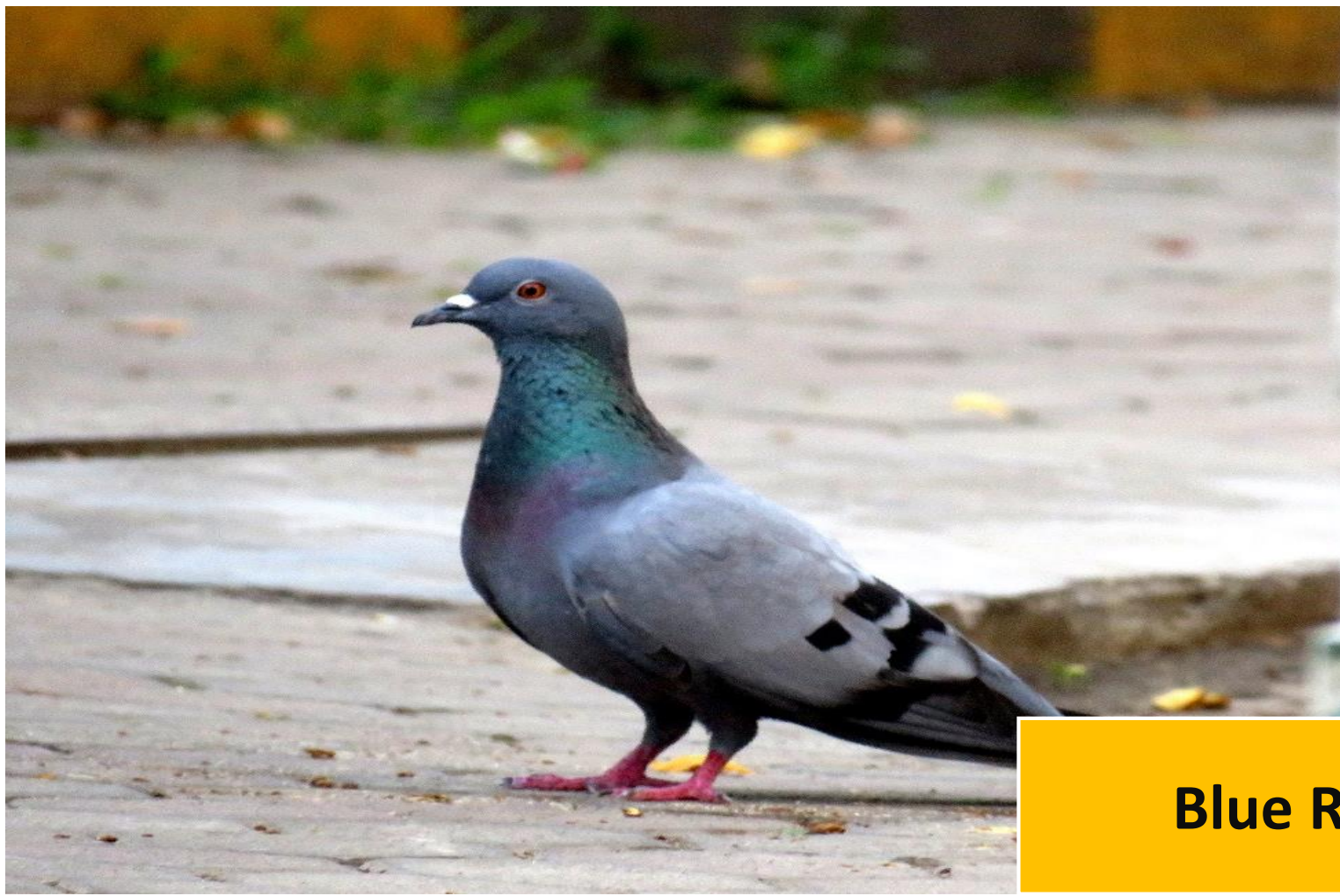


Shikra (*Accipite badius*)

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FAMILY- Accipitridae

A bird of prey closely resembling to falcons. They have blue-grey upper parts and brownish-banded underparts and tail. Commonly seen sitting upright on a perch, well camouflaged, closely observing the surroundings for any movement of prey. On spotting one, it suddenly ambushes and carries away the unwary prey in its talons. In IIRS campus it can be easily seen mocking Kites.



Blue Rock Pigeon (*Columba livia*)

FAMILY-Columbidae

This bird is commonly known as "Kabutar" in Hindi, this is one of highly adaptable species and can be found across the world in cities, villages, forests, fields and any type of environment possible acting as Invasive Species pushing the small birds such as House Sparrows etc.



Rufous Treepie (*Dendrocitta vagabunda*)

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FAMILY-Corvidae

A very inquisitive rufous bird, the treepie has a blackish head and a long greyish tail with black tip. It is found mostly in pairs in wooded regions moving in branches or hopping on ground in search of food, which is of a very wide range. It has the ability to chatter noisily and also sing melodiously.



DP Srivastava

Red wattled Lapwing (*Vanellus indicus*)

FAMILY-Charadriidae

It is commonly known in Hindi as "titeeri" is a very loud and noisy bird that is very commonly seen in and around IIRS making sound like "DID YOU DO IT" "DID YOU DO IT". The bird is ground nesting and lays ground camouflaged eggs and rest on ground so with every movement on ground it start making noises.



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Eurasian Collared Dove (*Streptopelia decaocto*)

FAMILY- Columbidae

It is a pale-grey and brown bird distinguished by a prominent, narrow black collar on the hind neck. It is a common sight and has a very beautiful display during courtship in which it flies on top flapping wings and then slowly glides down with its tail feathers fanned out wide.



Subrata Nandy

Spotted Dove (*Streptopelia chinensis*)

FAMILY- Columbidae

It is a small pinkish-brown long tailed dove with a black and white dotted patch on the base of the hind neck. Its upperparts is fine-spotted, hence this got its name.



Subrata Nandy

Alexandrine Parakeet (*Psittacula eupatria*)

FAMILY- Psittaculidae

One of very large parakeet with a distinctive red patch on the shoulder and a large bill. The male has a rose pink collar on the hindneck with a black band running from under the beak to the collar. It feeds on seeds, nuts, fruits, berries, buds, flower and nectars.



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Rose-ringed Parakeet (*Psittacula krameri*)

FAMILY- Psittaculidae

It is one of the most common cage birds of the country, widely trapped and reared as a pet for its "speaking skills". They have opposing toes and a flexible upper beak making their beak better equipped to deal with hard nuts and grains with equal dexterity.



Plum headed Parakeet (*Psittacula cyanocephala*)

Shaheer Khan

FAMILY- Psittaculidae

An endemic bird to the Indian Subcontinent. The male has a red head which shades to purple-blue on the back of the crown, nape and cheeks while the female has blueish-gray head. It is a bird of forest and open woodlands, even in city gardens. They are gregarious and noisy species with range of raucous calls 'Tuink'. They feed on grains, fruits, the fleshy petals of flowers and also known for raiding crops.



Aimon Bushra

Gray headed Parakeet (*Psittacula himalayana*)

FAMILY- Psittaculidae

The only Psittacid species exhibiting varied altitudinal migrations. They descend to the valleys in winters approximately during the last week of October. Green in colour with dark grey head with slight bluish hue, and black stripes to cheeks, upper mandible red with yellow tip.



Common Hawk (*Cuculus variu*)

DP Srivastava

FAMILY- Cuculidae

This bird is also called as "Brainfever Bird" due to its call 'brain fever brain fever', is a slende, medium-sized bird. It has ashy-grey upperparts and a rufous breast. Its underparts are finely barred in brown and the tail has broad bars.



DP Srivastava

Asian Koel (*Eudynamus scolopacea*)

FAMILY- Cuculidae

It is extremely common bird in India. It is glistening metallic black with yellowish-green bill and red eyes. The female on the other hand is dark-brown grey shade and is heavily spotted. It is a parasitic bird, which lays its egg in the crow's nest.



DP Srivastava

Greater Coucal (*Centropus sinensis*)

FAMILY- Cuculidae

One of the nest makers of the cuckoo family in India. These crow-sized birds with brick red wings and jet-black bodies make reverberating booming calls in the breeding season. That's why they are also called Crow Peasants They also make a peculiar rasping noise feeding. They feed on small snakes, lizards and insects.



Barn Owl (*Tyto alba*)

FAMILY- Tytonidae

It is a medium sized owl with a large round heart shaped head, with stiff feathers surrounding the facial disc. The upper is golden buff and grey, finely stippled with white and black. It is silky-white on the under parts, spotted with dark brown.



Spotted Owlet (*Athene Dwlet*)

DP Srivastava

FAMILY- Strigidae

It is believed to be "the wisest" of the birds due to the white plumage around the face like an old man. They can be seen perched in a well-canopied branch or in the holes in trees trunks. They are active even in the daytime during cloudy or foggy days. In evenings, they can be seen sallying for insects or catching the small rodents that ventures out early.



DP Srivastava

White-breasted Kingfisher (*Halcyon smyrnensis*)

FAMILY- Alcedinidae

It is commonly found kingfisher near human habitations. They feed on amphibians, small reptiles, insects as well as fishes and small birds. They perch on high branches and look and ambush the prey with beak.



Green Bee-eater (*Merops orientalis*)

DP Srivastava

FAMILY- Meropidae

It is a small bird with a rufous crown and a tinge of rufous on the hind neck. It has a fine, thin eye-stripe. As the name indicates, they feed on honeybees and similar insects. They are gregarious by nature and can be seen tightly huddled together on a perch at a vantage point from where they can see the insect flying. They make curious nests usually a tunnel sometimes up 1m in length, in banks of streams and mounds.



DP Srivastava

Common Hoopoe (*Upupa epops*)

FAMILY- Upupidae

The bird is known as "Hud Hud" in Hindi, is a medium-sized bird, which is widely distributed across the world and is commonly sighted. It is a fawn coloured bird with a highly distinctive black and white zebra-like markings on its back, wings and tail. It has a long beak, which is thin tapering black in colour with a fawn coloured base. The colourful fan-shaped crest also identifies it.



Indian Grey Hornbill (*Ocyrceros birostris*)

DP Srivastava

FAMILY- Bucerotidae

It is one of the most widespread hornbills in India. It is a brownish-grey bird with pale underparts, whitish on the belly and flanks. It has a pointed casque/horn like structure on the top of the beak. The bill is blackish in colour at the base and is pale yellow at the tip and it has a long graduated tail. It is often seen in pairs.



DP Srivastava

Coppersmith Barbet (*Megalaima haemacephala*)

FAMILY- Megalaimidae

A small grass green barbet identified by the crimson coloration of the forehead and breast, it is found mostly foraging on fig trees or making a very distinct call "tuk tuk" repeating many times gives the bird its name, as it reminds us of a distant coppersmith hitting on metal.



Brown headed Barbet (*Megalaima zeylancica*)

Tapan Adhikari

FAMILY- Megalaimidae

A stocky, green coloured barbet with brown head, neck, upper breast and back interspersed with wide white streaks. The bird is frugivorous, seen quite often on figs and fruit trees and easily recognised by "kutroo-kutroo" or "kutruk-kutruk".



DP Srivastava

Lesser Flameback (*Dinopium benghalense*)

FAMILY- Picidae

A common woodpecker named for its golden yellow back and the black hind neck. Another key features is crimson crest. Found mostly in all types of deciduous forests, it feeds mostly on insects, which it picks up by pecking the tree trunks. Has an unmistakable cracking call.



Red-whiskered Bulbul (*Pycnonotus jocosus*)

DP Srivastava

FAMILY- Pycnonotidae

This is familiar garden bird with the unmistakable red whiskers behind the eyes, which gives it the name. It also has a black crest, brown back, white underparts and a red vent. It feeds on fruit and small insects. One of its many calls remarkably sounds like "Pleased-to-meet-you".



DP Srivastava

Red-vented Bulbul (*Pycnonotus cafer*)

FAMILY- Pycnonotidae

This is a small brownish bird with a black head with crest and a crimson red vent. It is commonly found near habitations and also in wooded feeding on fruits, berries and nectar. A noisy bird with many calls, the commonest call is peep-peep-peep.



Himalayan Bulbul (*Pycnonotus leucugenys*)

Aimon Bushra

FAMILY- Pycnonotidae

A greenish-brown bird with black head, throat and crest, and yellow vent. They prefer forest habitats with rich shrub layer along with urban gardens. This bulbul prepare beautiful small cup-shaped nest, made of herbs, roots and twigs same like other bulbuls. They feed on insects and small invertebrates, and berries, fruits, seeds, buds and nectar,



DP Srivastava

Indian Rock Chat (*Cercomela fusca*)

FAMILY- Muscicapidae

Brown bird with rufous underpart and dark blackish tail, it is usually found in rocky areas and also old buildings. It can be easily identified by its habit of stretching its legs and bobbing its front body in a comical manner. It feeds mostly on insects and its usual call is a whistle-like chee.



Common Tailor Bird (*Orthotomus sutorius*)

DP Srivastava

FAMILY- Cisticolidae

A very active yellow-green bird with a rufous forehead, it is found in garden bushes and edge of forests. It gets its name from its ability to make a nest by sewing leaves together. It feeds on insects, larvae and flower nectar. It is very loud for its diminutive size and the call is a much repeated pitchik-pitchick-pitchik.



Aimon Bushra

Oriental White-eye (*Zosterops palpebrosus*)

FAMILY-Zosteropidae

This is a small yellowish-green bird with a distinctive white eye-ring for which it got its name. The birds can be spotted flitting around from one tree to another uttering a jingling sound. It feeds primarily on insects, berries, seeds and nectar.



Scaly Breasted Munia(*Lonchura punctulata*)

DP Srivastava

FAMILY-Estrildidae

A stubby dark bill typically of a grain eating birds, brown underparts and a dark brown head. The underparts are white dark scale markings. They are highly social and one can see them eating grass seeds early morning near nursery area in campus. For roosting they sit by side to each other.



DP Srivastava

Oriental Magpie Robin (*Copsychus saularis*)

FAMILY-Muscicapidae

This bird is a common black and white robin with key features like the long cocked-up tail and prominent white patch on the wings. The male is a shiny blue-black above and white below. The female is slaty above and white below. It feeds on many insects and some plant matter..



Common Myna (*Acridotheres tristis*)

DP Srivastava

FAMILY-Sturnidae

One of the most common birds seen in the vicinity of human habitation, the Myna has a dark brown body, glossy black head and yellow beak, legs and eye patch. It feeds on fruit, grains and insects. It has a huge repertoire of calls.



DP Srivastava

Brahminy Myna (*Temenuchus pagodarum*)

FAMILY-Sturnidae

The bird is identified by the glossy black crest and rufous orange sides and underparts. Its wings and greyish with black tips. It feeds on fruits and insects and has a wide range of calls, majority of which are chattering noises. The bird has the ability to mimic many other bird calls.



Black Drongo (*Dicrurus macrocercus*)

DP Srivastava

FAMILY-Dicruridae

A common glossy black bird often found perched on a wire near lawns, open spaces, the drongo's colour and deeply forked tail are unmistakable. It feeds primarily on insects and also on small birds and bats, usually catching them in flight.



DP Srivastava

House Crow (*Corvus splendens*)

FAMILY-Corvidae

The most commonly recognised glossy greyish black bird found in our vicinity. It's a omnivore and can feed on anything. The call is the unmissable Ka-aa. Due to its long association, it has found its way into many cultural aspects of humans.



Jungle Crow (*Corvus macrorhynchos*)

DP Srivastava

FAMILY-Corvidae

It is widespread across Asia. It has an overall dark grey plumage from the back of the head, neck, shoulders and lower body. The wings tail, face and throat are glossy black in colour. It is less common than the House crow.



Aimon Bushra

White Throated Fantail (*Rhipidura aureola*)

Family-Rhipiduridae

The bird can be identified by white super cilium and white throat, lack of spotting on wing-coverts, slate grey underparts and smaller white tips to tail. The bird is unmistakably identified by erecting and spreading tail along with weak whistle of *tri-tri-tri*.



Jungle Babblers (*Turdoides striatus*)

DP Srivastava

Family-Leiothrichidae

Also known as 'seven sisters' for their habit of moving in groups of 6-8 members in a flock, is an extremely noisy gregarious bird, which is usually seen in association with squirrels on the insects among the leaf litter. It is an earthy-brown coloured bird with creamy-white eyes, yellowish bill and legs. It has a rufous tail, grey throat and breast streaked with pale brown.



Saurabh Shanu

Indian Paradise Flycatcher (*Terpsiphone paradisi*)

Family-Monarchidae

It is a medium sized bird which is native to the Asian region. The male has a black head and crest and white or rufous-chestnut upperparts. It also has a blue eye-ring. The most distinctive feature is its long tail. The female is short-tailed and rufous has rufous chest above and white below



Purple Sunbird (*Terpsiphone paradisi*)

ikar Pawar

Family-Nectariniidae

The smallest bird of India, can be seen hovering over flowers with its iridescent blue-black plumage and long curved bill to drink nectar or catch spiders. Even though it is very small in size, its calls are distinctly loud and most of the time we spot it with its call. The female is dull in colour.



Aimon Bushra

Crimson Sunbird (*Aethopyga siparaja*)

Family- Nectariniidae

A beautiful, small fire coloured birds roaming from one flower to another in early morning with making noises Chee-cheewee. Adult males has a bright red throat, chest, rump and sides with blue mustachial stripes. Females are of olive green back, and yellowish chest. They mostly feed on nectar, although take insects in breeding seasons

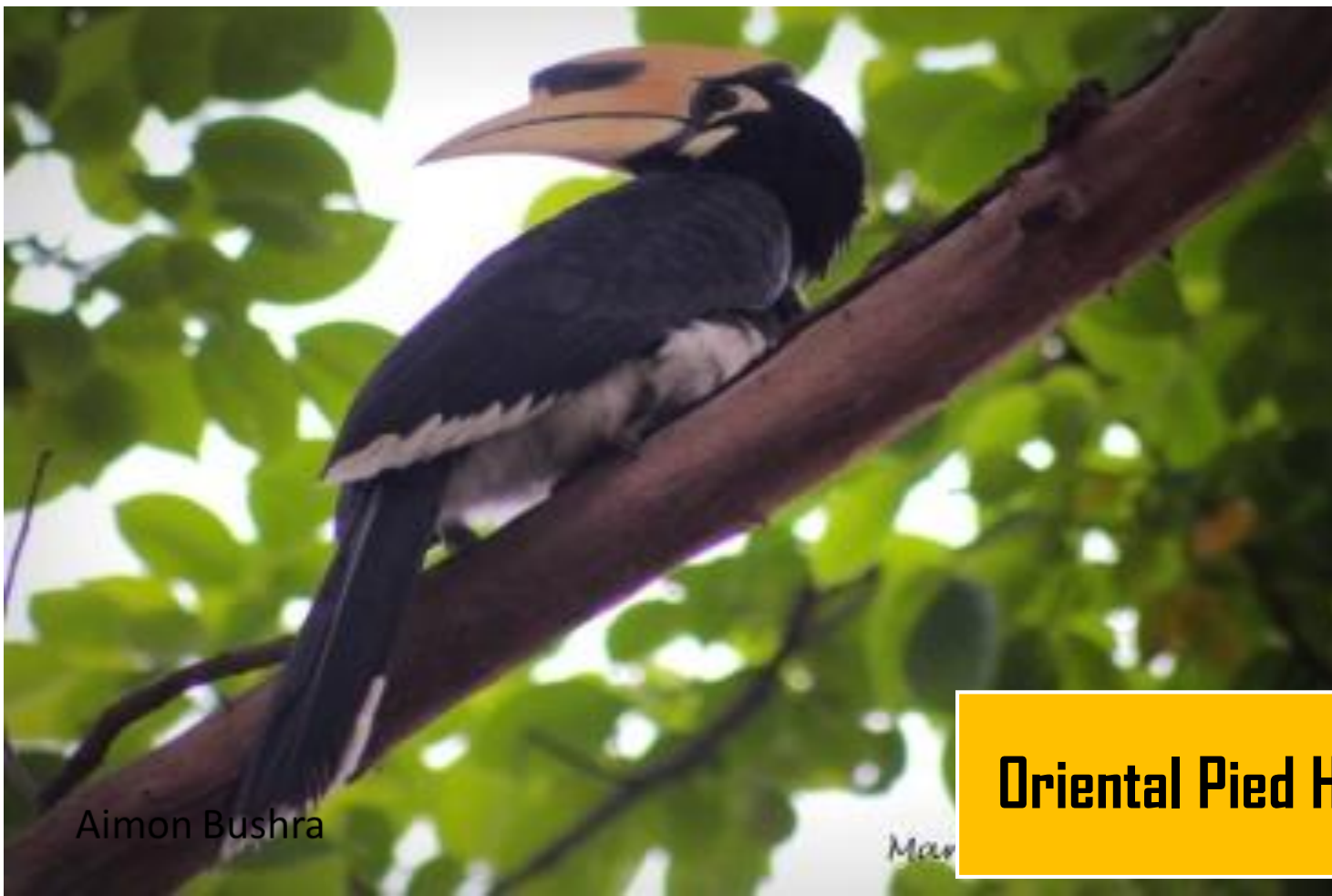


Emerald Dove (*Chalcophaps indica*)

Aimon Bushra

Family- Columbidae

A beautiful pigeon distributed across the sub-continent with stocky, broad winged and emerald-green upperparts. Typically very rapid in flight, and roost on high tree canopies. One need to really work hard to identify them from tree canopies but result are really worth.



Aimon Bushra

Oriental Pied Hornbill (*Anthracoceros albirostris*)

Family- Bucerotidae

A big beautiful frugivore bird cannot be ignored due to its beauty and size. It is commonly found across a variety of woodlands especially where old trees are in good number as the bird uses tree trunks as nest. Diet varies in breeding and non-breeding seasons from berries, figs, fruits, to small insects, frogs, fishes to even small birds



House Sparrow (*Passer domesticus*)

Tapan Adhikari

FAMILY-Passeridae

One of the most easily recognized birds in the world, it is found almost everywhere near human habitation. The present trend is that there is a strong decline in number due to change in house making systems, increase in large body of birds such as Pigeons, bulbuls and crows etc.

Mammals

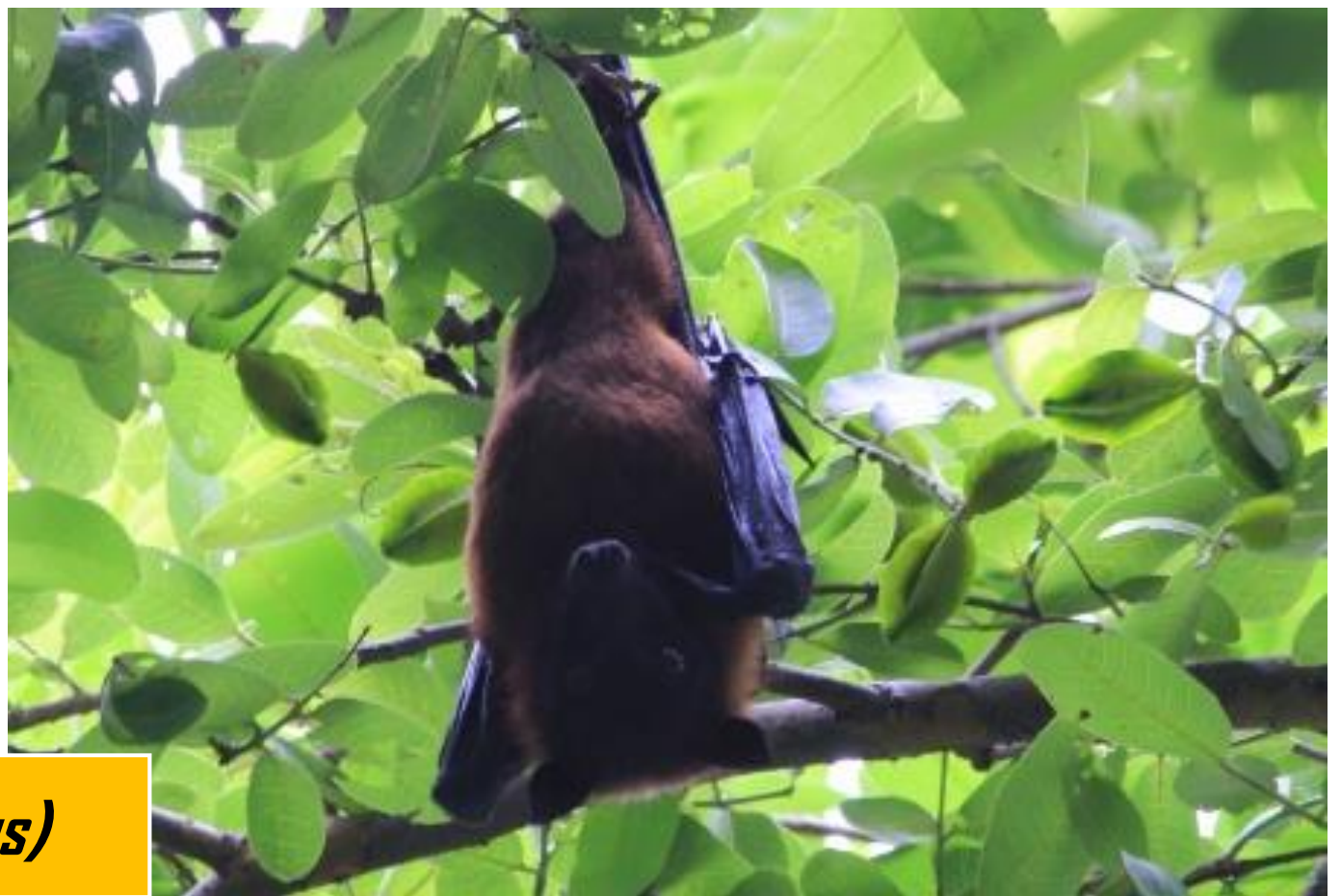




Grey Mongoose (*Herpestes edwardsii*)

FAMILY-Herpestidae

A medium sized brownish-yellowish grey lighter underside, with dark red tail tip. Usually seen solitary or in pair found in variety of habitats . Being carnivores it feeds on variety of things ranging from small rodents, eggs, insects and snakes.



Indian Flying Fox (*Pteropus Giganteus*)

FAMILY-Pteropodidae

One of common species of fruit bat found in major parts including in urban areas. The face resembles with face of fox . Feed on fruits especially seen feeding on Rudraksha , Leechi and semal tree in campus. They are gregarious and roost together on large trees.



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Vesper Bat(*Vespertelionidae Genus*)

FAMILY-Herpestidae

One of common insectivorous bats commonly known as 'evening bats' distributed throughout country. lives In cracks, tree holes and crevices of houses as well as natural faults. Have good ultrasonic beam helps to catch insects in air.



Five Strip Palm Squirrel(*Funambulus pennanti*)

FAMILY-Sciuridae

Small olive-brown or greyish-brown with pale under parts and five parallel lines on its back from head to tail. They are known as Farmers of Forest as they hide seeds in ground and forget and with new monsoon these seeds grows on their own.



DP Srivastava

Snouted Fruit Bat (*Cynopterus Genus*)

FAMILY-Pteropodidae

A medium sized fruit bat can be easily seen flying overhead or on fruit trees after dusk. They have relatively long snout with brown to grey body. They nest on high palm trees making their own tent like structure where fruits are available in large amount. They have a good smell sense and they locate the fruits with this only .

BUTTERFLIES





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Striped Tiger (*Danaus genutia*)

FAMILY-Nymphalidae

The yellowish brown butterfly with clear black veins and white spots is another common species seen roosting in all type habitat. It is seen in large number during and after the rains. The caterpillars feed mostly on the milkweed plant while adults prefer a variety of flowers.



Blue Tiger (*Triumala limniace*)

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FAMILY-Nymphalidae

One of largest butterflies and a known migrant, can be easily seen in flight. The pale blue streaks and spots on the brownish wings are distinctive. The adults alight on many flower species for nectar and the caterpillars also feed on different species.



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Common Gull (*Cepora nerissa*)

FAMILY-Pieridae

Most common butterfly seen throughout the year in all types of habitats frequenting flowers and damp patches. The yellow wing have distinctive dark veins and white patches. It prefers Capparis species. For laying eggs.



Common Emmigrant (*Catopsilia pomona*)

DP Srivastava

FAMILY-Pieridae

A common butterfly seen during most of the years flying in a distinctive pattern. They are also seen mud puddling in large numbers in wet patches during the dry weather. The wing colour is dull yellow to greenish white without markings . The sp. Prefer cassia sp. Plants for egg laying.



DP Srivastava

Common Jezebel (*Delius eucharis*)

FAMILY-Pieridae

A brightly coloured charismatic butterfly flying slowly amidst wooded regions. It is seen frequenting flowers and damp areas. The underside of the hind wing has a splash of yellow and very distinctive red spots circumscribed by white rings. Caterpillars feed on the parasites plants found on the different trees.



Grass Jewel (*Freyeria trochylus*)

DP Srivastava

FAMILY-Lycaenidae

This is thinnest butterfly in India and hence gets easily overlooked. Found in drier regions closer to ground, the hind wing is tail less and both the sexes are brownish above. Underside of hind wing has distinguishing pattern of four black spots bordered by orange. Caterpillars feed on a wide range of leguminous plants



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Red Pierrot (*Talicada nyseus*)

FAMILY-Lycaenidae

The colourful butterfly usually found fluttering around moist regions in forest, hedges and gardens. The hind wing is tailed and has a bright orange area on the upper side, which is otherwise black. The underside is white with black spots.



Orange Oakleaf (*Kallima inachus*)

DP Srivastava

FAMILY-Nymphalidae

One of beautiful and interesting butterfly can be seen hovering and suddenly disappearing near trees. The upperside colouration is very consistent, but the cryptic underside looks like dry leaf helping them to camouflaged well in trees and on ground..



DP Srivastava

Purple Sapphire (*Heliophorus epicles*)

FAMILY-Lycaenidae

Small beautiful butterfly frequent to disturbed forest edge habitats at elevations between about 500-1500. They can be seen in a very lively aerial sortie, twisting and turning in tight circles until one of is shaken off, at which time the other returns to perch on high bushes.



Plain Cupid (*Chilades pandava*)

DP Srivastava

FAMILY-Lycaenidae

One of common small butterfly found in the campus. They can be seen in flight near to the ground visiting one flower to another. They feeds on new shoots of ornamental Sago palm and other Cycas species, in Singapore it is considered as pest in horticulture of palms.



DP Srivastava

Common Evening Brown (*Melanitis leda*)

FAMILY-Nymphalidae

One of butterfly which is more active in evening hours and attracted toward light. Flight is jerky and stay close to ground. Caterpillar feeds on grasses and adults feeds on plant sap and fruits. This is one of the butterfly of which has maximum seasonal forms.



Gram Blue (*Euchrysops cnejus*)

DP Srivastava

FAMILY-Lycaenidae

Small butterfly can be seen on wings from one flower to another or over grasses. The upperparts are pale purplish with a bluish shade, apparently only in light. Underside is silver gray with yellowish and faint brown tint with bin=sinate on hind wing. The feed on new shoots of palms.



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Common Lime (*Papilio demoleus*)

FAMILY-Papilionidae

The most commonest of all swallowtail butterfly. It is unmistakable to identify as its large, tailless wings with yellow marks on black wings. This butterfly got its name from Lemon plants as caterpillars feed on these plants along with curry leaves.



Common Fivering (*Ypthima baldus*)

DP Srivastava

FAMILY-Nymphalidae

Seen in open spaces and forested areas. Most commonly seen during March to November. The caterpillars feed mainly on grasses.



Tawny caster (*Acraea violae*)

FAMILY-Nymphalidae

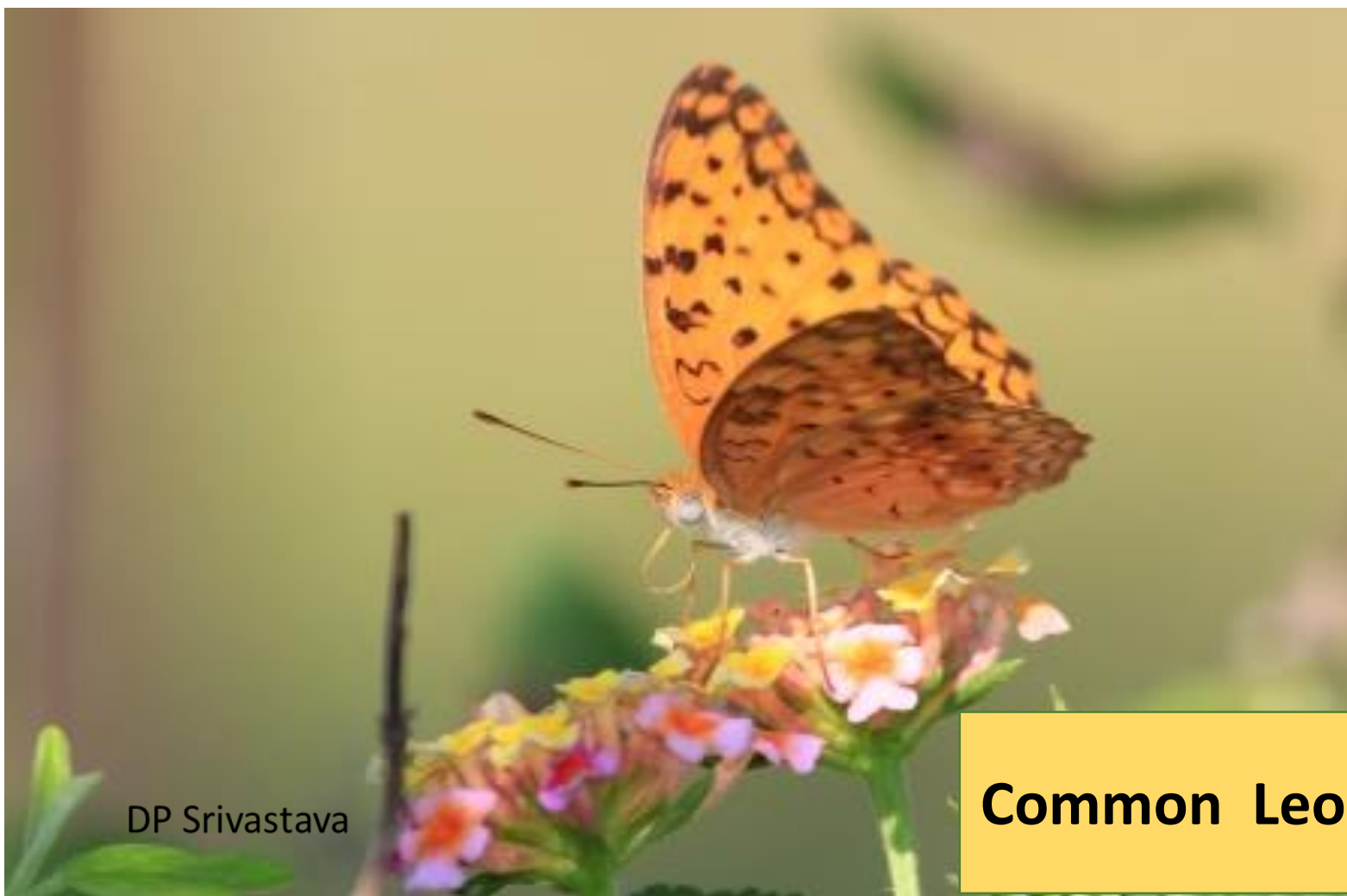
One of common butterfly seen in major habitats of country. It is one of the uneatable butterfly by predators and plays dead or exudes a yellow fluid when caught to avoid predators. Main host plant is *Passiflora* sp. (Passion Flower)



Common Grass Yellow (*Eurema hecabe*)

FAMILY-Pieridae

A common butterfly seen across the country. The underside of wings are yellow with prominent rust coloured spots. Caterpillars feed upon leguminous plants and adults can be seen mudpuddling in large flocks during dry seasons



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Common Leopard (*Phalanta phalantha*)

FAMILY-Nymphalidae

A beautiful tawny butterfly found in forest edges, open areas and gardens, it is known for its territorial and quarrelsome nature. Frequents flowers and damp patches in gardens also. Pattern looks like of leopard from where its got its name.



Orange Oakleaf (*Kallima inachus*)

DP Srivastava

FAMILY-Nymphalidae

One of beautiful and interesting butterfly can be seen hovering and suddenly disappearing near trees. The upperside colouration is very consistent, but the cryptic underside looks like dry leaf helping them to camouflaged well in trees and on ground.. They are commonly found between altitudes of 100-800m with good woody covers. The caterpillars depends on Acanthaceae sp. plants



DP Srivastava

Plain Tiger (*Danaus chrysippus*)

FAMILY-Nymphalidae

The most common butterfly and most easily recognised due to colour pattern; The pattern of Tiger colour, i.e. yellow orange wings. The butterfly uses milkweed plants especially calotropis for laying eggs, so caterpillar feed on it and get a good quantity of poison in body making the risk of predation low. This provoke other species to mimic.



DP Srivastava

Common Crow (*Euploea core*)

FAMILY-Nymphalidae

Another common butterfly in countryside. The adult has a black body with white spots. The wings are brown with two distinctive rows of white spots. The adults are known to feed on the sap of flowers, root, damaged leaves and stems of many plants

REPTILES AND AMPHIBIANS



Nupur Rautela



Nupur Rautela

Rat Snake (*Ptyas mucosa*)

FAMILY-Colubiridae

Rat Snake is a diurnal species shows both arboreal and terrestrial activity depending upon foraging and resting needs. Behaviour fast, alert and very quick to respond, non-Venomous. It is big snake of up to 7feet with two black unmistakable markings near mouth. Feeds on a variety of prey mostly on rodents and toads; also feeds upon birds, small mammals, other snakes, all kind of lizards, eggs etc.



Brooke's gecko (*Hemiactylus brookiis' complexi*)

DP Srivastava

FAMILY-Gekkonidae

One of complex species to differentiate from other species of Hemidactylus. Commonly found in variety of habitats especially in barks of trees or crevices. They become more active during nights and feeds on small insects.



DP Srivastava

Himalayan Ground Skink (*Asymblepharus*)

FAMILY-Scincidae

Another common skink seen in campus in the relatively undisturbed litters on slopes. They are slightly bigger than Little skink. They also feed on small insects as well as seen feeding on small frogs.



Common Toad (*Duttaphrumus melanostictus*)

DP Srivastava

FAMILY-Bufonidae

One of commonly distributed toad species across India. In campus they can be seen easily by following the calls near International Hostel in the water channels and adults in the adjoining bushes as they are more terrestrial. They breed in monsoon and tadpoles are black in colour and can be easily found in any permanent and temporary water pools



DP Srivastava

Indian Bull Frog (*Hoplobatrachus tigerinus*)

FAMILY-Dicroglossidae

Most solitary and nocturnal in nature, inhabiting holes and bushes near permanent water sources. They start breeding after first rain and can be easily seen jumping across the campus in night. They feed on variety of insects, invertebrates, mices, young frogs, earthworms etc. Call is unmistakably recognised "cronk cronk cronk".



Common little skink (*Lygosoma punctata*)

DP Srivastava

FAMILY-Scincidae

A small skink species having a distinctive red tail, which is lost in adults. These can be easily seen in the leaf litter on the floors under trees or near crevices of old structures. They feed on small insects and caterpillars.

REFERENCES

- Bushra, A. 2015, Effect of vegetation fragments on birds community structure in an urban environment, Aligarh Muslim University
- Grimmett, R., Inskipp, C., Birds of the Indian Subcontinent, Oxford Publications
- Kehimkar, I.(2000), The Book of Indian Butterflies, Bombay Natural History Society
- Menon, V. (2003), A field Guide to Indian Mammals, Penguin India
- TK, S. (2013), A field guide to the Biodiversity of Asola Bhatti Wildlife Sanctuary, CEC BNHS, Delhi

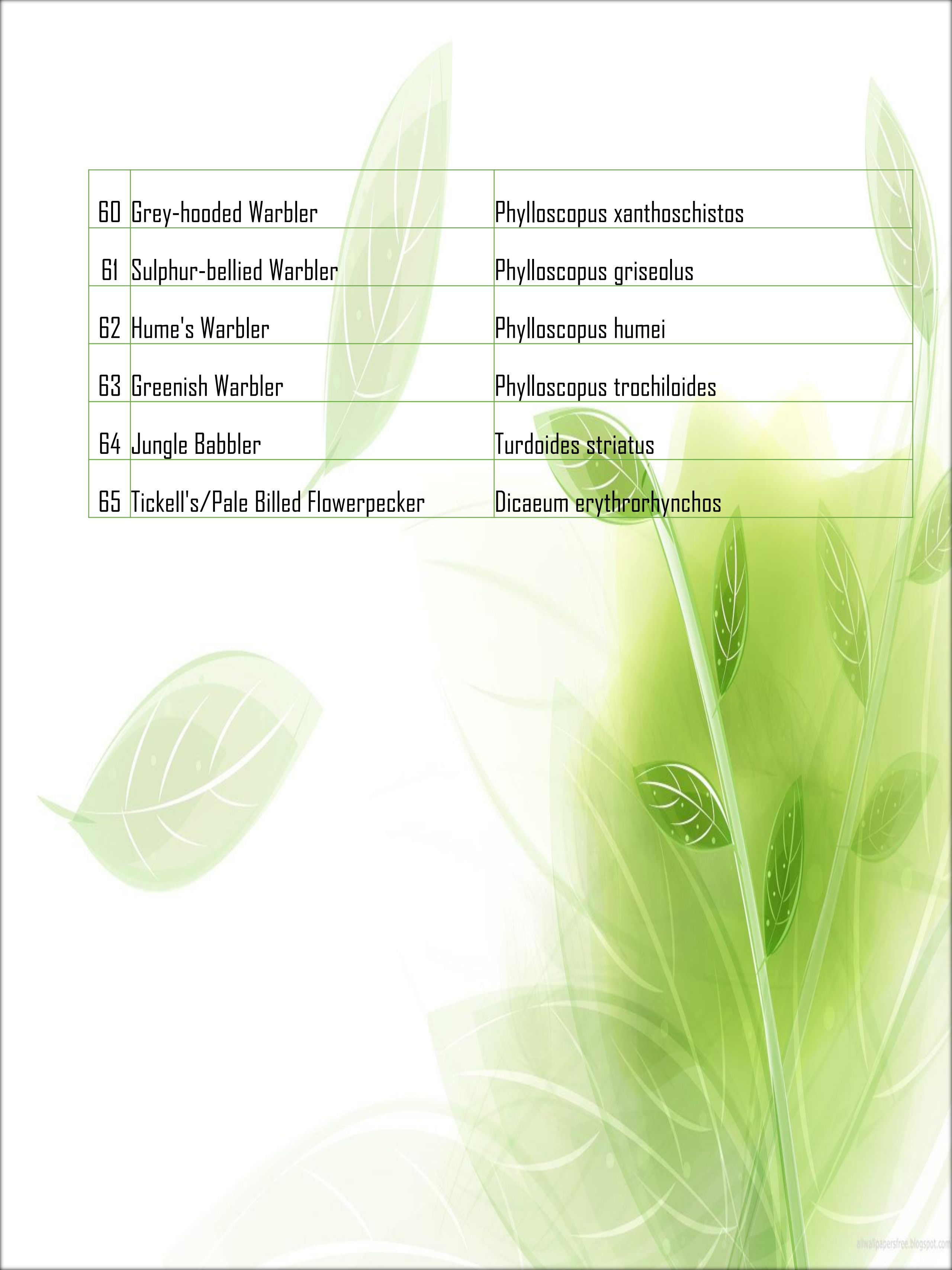
CHECKLISTS

BIRDS

S.I. No.	General Names	Scientific Names
1	Lesser Flameback	<i>Dinopium benghalense</i>
2	Brown-headed Barbet	<i>Megalaima zeylanica</i>
3	Coppersmith Barbet	<i>Megalaima haemacephala</i>
4	Oriental Pied Hornbill	<i>Anthracoceros albirostris</i>
5	Indian Grey Hornbill	<i>Ocyroceros birostris</i>
6	Common Hoopoe	<i>Upupa epops</i>
7	White-throated Kingfisher	<i>Halcyon smyrnensis</i>
8	Green Bee-eater	<i>Merops orientalis</i>
9	Common Hawk Cuckoo	<i>Hierococcyx varius</i>
10	Asian Koel	<i>Eudynamys scolopacea</i>
11	Greater Coucal	<i>Centropus sinensis</i>
12	Alexandrine Parakeet	<i>Psittacula eupatria</i>
13	Rose-ringed Parakeet	<i>Psittacula krameri</i>
14	Plum-headed Parakeet	<i>Psittacula cyanocephala</i>
15	Slaty headed Parakeet	<i>Psittacula himalayana</i>
16	Asian Palm Swift	<i>Cypsiurus balasiensis</i>
17	Barn Owl	<i>Tyto alba</i>
18	Spotted Owlet	<i>Athene brama</i>
19	Rock Pigeon	<i>Columba livia</i>
20	Oriental Turtle Dove	<i>Streptopelia orientalis</i>

21	Spotted Dove	<i>Streptopelia chinensis</i>
22	Red Collared Dove	<i>Streptopelia tranquebarica</i>
23	Eurasian Collared Dove	<i>Streptopelia decaocto</i>
24	Emerald Dove	<i>Chalcophaps indica</i>
25	Black Kite	<i>Milvus migrans</i>
26	Shikra	<i>Accipiter badius</i>
27	Long-tailed Shrike	<i>Lanius schach</i>
28	Grey Treepie	<i>Dendrocitta formosae</i>
29	Rufous Treepie	<i>Dendrocitta vagabunda</i>
30	House Crow	<i>Corvus splendens</i>
31	Large-billed Crow	<i>Corvus macrorhynchos</i>
32	Rosy Minivet	<i>Pericrocotus cinnamomeus</i>
33	Long-tailed Minivet	<i>Pericrocotus ethologus</i>
34	White-throated Fantail	<i>Rhipidura aureola</i>
35	Black Drongo	<i>Dicrurus macrocercus</i>
36	Spangled Drongo	<i>Dicrurus bracteatus</i>
37	Asian Paradise-flycatcher	<i>Terpsiphone paradisi</i>
38	Red-breasted Flycatcher,	<i>Ficedula parva</i>
39	Bar-winged flycatcher	<i>Hemipus picatus</i>
40	Verditer Flycatcher	<i>Eumyias thalassina</i>
41	Grey-headed Canary Flycatcher	<i>Culicicapa ceylonensis</i>

40	Verditer Flycatcher	<i>Eumyias thalassina</i>
41	Grey-headed Canary Flycatcher	<i>Culicicapa ceylonensis</i>
42	Oriental Magpie Robin	<i>Copsychus saularis</i>
43	Indian/Brown Rock-chat	<i>Cercomela fusca</i>
45	Chestnut-tailed Starling	<i>Sturnus malabaricus</i>
46	Brahminy Starling	<i>Sturnus pagodarum</i>
47	Asian Pied Starling	<i>Sturnus contra</i>
48	Common Myna	<i>Acridotheres tristis</i>
49	Jungle Myna	<i>Acridotheres</i>
50	Great Tit	<i>Parus major</i>
51	Dusky Crag Martin	<i>Hirundo concolor</i>
52	Wire-tailed Swallow	<i>Hirundo smithii</i>
53	Black Bulbul	<i>Hypsipetes leucocephalus</i>
54	Red-whiskered Bulbul	<i>Pycnonotus jocosus</i>
55	Himalayan Bulbul	<i>Pycnonotus leucogenys</i>
56	Red-vented Bulbul	<i>Pycnonotus cafer</i>
57	Grey-breasted Prinia	<i>Prinia hodgsonii</i>
58	Oriental White-eye	<i>Zosterops palpebrosus</i>
59	Common Tailorbird	<i>Orthotomus sutorius</i>



60	Grey-hooded Warbler	<i>Phylloscopus xanthoschistos</i>
61	Sulphur-bellied Warbler	<i>Phylloscopus griseolus</i>
62	Hume's Warbler	<i>Phylloscopus humei</i>
63	Greenish Warbler	<i>Phylloscopus trochiloides</i>
64	Jungle Babbler	<i>Turdoides striatus</i>
65	Tickell's/Pale Billed Flowerpecker	<i>Dicaeum erythrorhynchos</i>

CHECKLISTS

BUTTERFLIES

1	Plain Tiger	<i>Danaus chrysippus</i>
2	Striped Tiger	<i>Danaus genutia</i>
3	Blue Tiger	<i>Tirumala limniace</i>
4	Common Crow	<i>Euploea core</i>
5	Common Emigrant	<i>Catopsilia pomona</i>
6	Common Gull	<i>Cepora nerissa</i>
7	Pioneer	<i>Belenois aurota</i>
8	Common Jezebel	<i>Delias eucharis</i>
9	Dark Grass Blue	<i>Zizeeria karsandra</i>
10	Red Pierrot	<i>Talicauda nyseus</i>
11	Grass Jewel	<i>Chilades trochylus</i>
12	Orange Oakleaf	<i>Kallima inachus</i>
13	Purple Sapphire	<i>Heliophorus epicles</i>
14	Plain Cupid	<i>Chilades pandava</i>
15	Common Evening Brown	<i>Melanitis leda</i>
16	Gram Blue	<i>Euchrysops cnejus</i>
17	Indian cabbage White	<i>Pieris canidia</i>
18	Common Grass Yellow	<i>Eurema hecabe</i>
19	Common Lime	<i>Papilio demoleus</i>
20	Common Fivering	<i>Ypthima baldus</i>
21	Tawny Caster	<i>Acraea terpsicore</i>
22	Tiny Grass blue	<i>Zizula hylax</i>
23	Zebra Blue	<i>Leptotes plinius</i>
24	Common Mime	<i>Papilio clytia</i>
25	Glassy tiger	<i>Parantica aglea</i>

REPTILES AND AMPHIBIANS

1	House Gecko	Hemidactylus flaviridis
2	Brook's Gecko	Hemidactylus brookii's complexi
3	Common Little Skink	Lygosoma punctata
4	Himalayan Ground Skink	Asymblepharus himalayanus
5	Oriental Garden Lizard	Calotes versicolor
6	Bengal Monitor	Vranus bengalensis
7	Rat snake	Elaphe [Pantherophis] obsoleta
8	Indian Bull Frog	Hoplobatrachus tigerinus
9	Common Toad	Duttaphrumus melanostictus
10	Skittering Frog	Euphlyctis cyanophlyctis

MAMMALS

1	Common Mongoose	Herpestes edwardsi
2	Five Striped Palm Squirrel	Funambulus pennanti
3	Flying Fox	Pteropus Giganteous
4	Snouted Fruit Bats	Cynopterus Genus.
5	Vesper Insectivorous Bat	Vespertelionidae Genus

*May our surround remain
healthy and euphoric,
May all the trees bloom and
flourish.*

*Sending you good wishes on world
environment day*

