

save nature



Puducherry Envis Hub

*Host Centre : Puducherry Pollution Control Committee
Funded by Ministry of Environment, Forest & Climate Change
Government of India, New Delhi*

REPTILES AND ANURANS OF OUSTERI LAKE, PUDUCHERRY

Social Media :



@envispuducherry



envishubpdyl



ENVIS HUB - Puducherry



ENVIS Puducherry

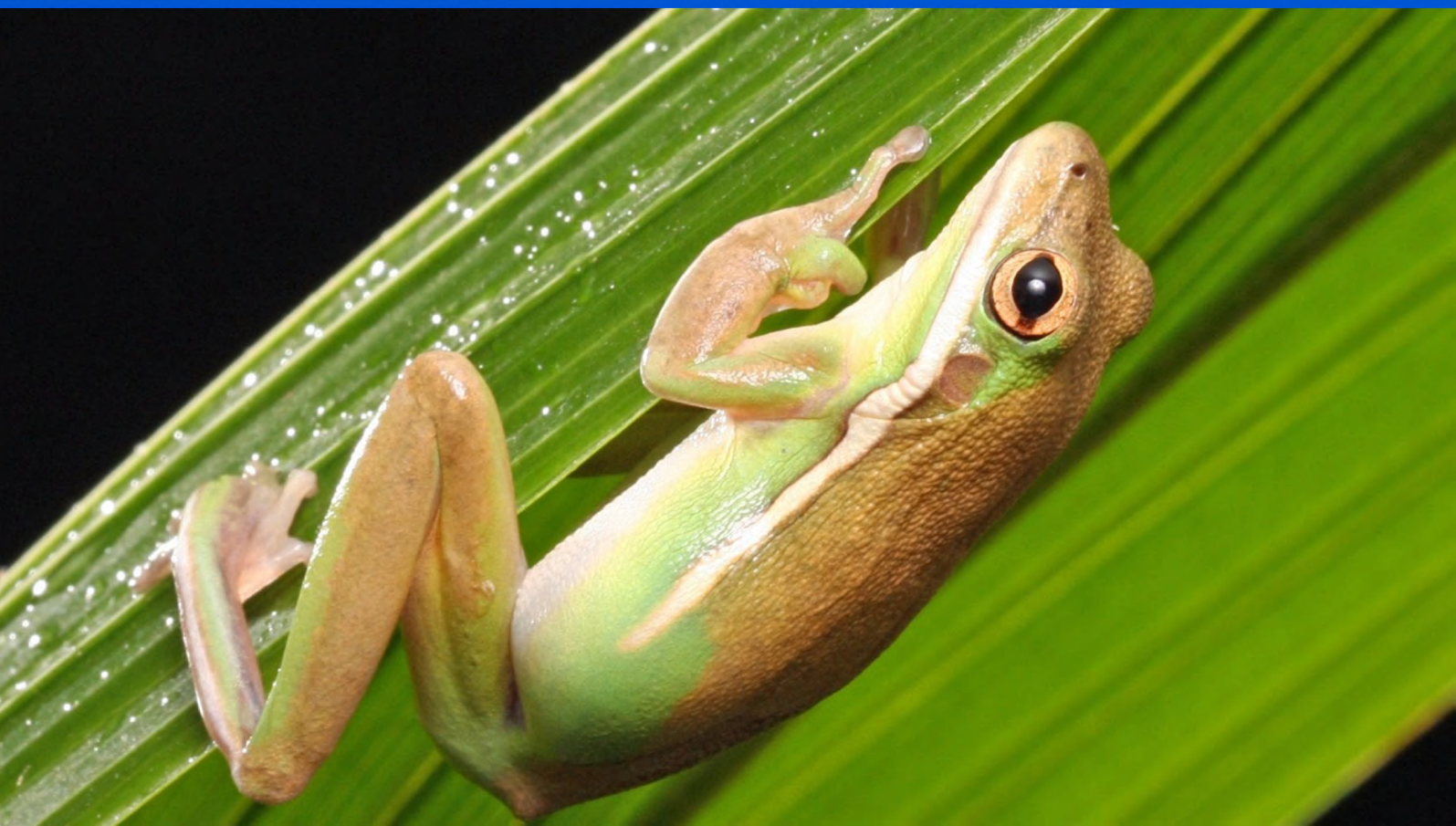
ISBN: 978-81-954242-5-2

PUDUCHERRY ENVIS HUB

Puducherry Pollution Control Committee

*Funded by Ministry of Environment, Forest & Climate Change
Government of India, New Delhi*

Reptiles and Anurans of Ousteri Lake, Puducherry



Copyright :

Text & Illustrations © Dr. R. Alexandar, Independent Researcher, Puducherry.

Dr. Ravichandra Mondreti, Independent Researcher, Andhra Pradesh.

Mr. Rahul Gour, Master Student, Department of Ecology & Environmental Sciences, Pondicherry University, Puducherry.

ISBN:



Editorial Board (ENVIS HUB, PPCC)

Smt. R. Smitha, I.A.S.,
Secretary (DST&E)-cum-Chairperson (PPCC)

Dr. S. Dinesh Kannan, IFS
Member Secretary (PPCC)

Dr. R. Sagaya Alfred
Senior Scientific Officer, DSTE

Shri. P. Vipin Babu
Scientist/ENVIS Co-ordinator

Text Editors

Smt. J. Nithiya
Programme Officer

Shri. S. Jagan Kumar
Information Officer

Shri. S. Dhinesh
Information Technology Officer

Shri. N. Sridhar
DEO / Para Taxonomist

Disclaimer:

All efforts have been made to make the information as accurate as possible. The views expressed by the authors belong to them and do not necessarily reflect the views of the Puducherry Envis Hub or Puducherry Pollution Control Committee. The Envis Hub is no way responsible for any liability arising out of the contents of the chapters. Any discrepancy found may be brought to the notice of the Puducherry Envis Hub.

SMITHA. R, I.A.S.,

Secretary (Environment) /

Chairperson (PPCC)



PREFACE

It is with great pleasure that 'Reptiles and Anurans of Ousteri Lake' published by ENVIS Hub Puducherry is the 3rd series of publication on Fauna of Puducherry. Reptiles and Anurans are important component of an ecosystem, they help us in regulation the numbers of serious agricultural pests, insects and rodents. Reptiles and Anurans are cold-blooded vertebrates, unlike birds and mammals, reptiles do not maintain a constant internal body temperature and hence they require high quality of environment for its survival. The life history and conservation status of most of the reptile species are imperfectly understood or completely unknown except for a few of the more charismatic or popular larger species like Crocodiles and Monitor Lizards. Reptiles and Anurans are facing enormous threats such as habitat loss & fragmentation, trade, toxic chemicals, emerging infectious diseases & global climate change.

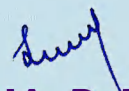
Ousteri Lake has been identified as an important wetland of Asia by the International Union for Conservation of Nature and Natural Resources (IUCN) and identified as a wetland of national importance under the national wetland conservation programme of the Ministry of Environment, Forest and Climate Change (MoEF&CC) and has also been declared as one of the 93 significant wetlands in Asia by the Asian Wetland Bureau. The lake has also been declared as the first bird sanctuary by the Government of Puducherry in 2008. The Ousteri Lake is home for a number of plants and animal diversity, but largely remain un-recorded. With this book, the authors have recorded and provided species information on reptilian and anuran diversity in and around Ousteri Lake represented by Terrapins & Tortoises with 2 species; Lizards with 10 species; Snakes with 19 species and a total of 17 different Anuran species.

More than one fifth of all known reptile species are considered endangered or close to becoming extinct. Reptiles are especially threatened by non-native species that compete for resources or feed on them, and habitat loss. Amphibians are one of the most endangered animal groups to the changing climatic conditions. At least 30 percent of all amphibian species are now threatened and may become extinct. Frogs, Toads salamanders are vanishing due to habitat loss, environmental pollution, global warming, UV light exposure, disease and the introduction of exotic species. Amphibians alert us to minor but definite changes in the ecosystem that could lead to the extinction of many more species, not excluding humans.

I commend this book will be highly useful to managers, conservationists, researchers and young students to conceptualize ideas and develop their knowledge on the available diversity of reptiles and anuran species in and around Ousteri lake. I congratulate all the team members on their efforts to prepare this book.

Place: Puducherry

Date:


SMITHA. R, I.A.S.,

Dr. S. DINESH KANNAN, IFS

Director (DSTE) /

Member Secretary (PPCC)



FROM THE DESK OF MEMBER SECRETARY

It is my immense pleasure to give my preface note for the book of Reptiles and Anurans of Ousteri Lake, Puducherry. Reptiles and Anurans are generally unseen and overlooked terrestrial vertebrates, however form an important component in natural ecosystems. They possess extremely diverse life histories and plays a key role in an ecological food chain. They help regulate the numbers of serious agricultural pests by consuming pests, insects and rodents.

The Ousteri lake in Puducherry has been identified as a wetland of National Importance under the national wetland conservation program of the Ministry of Environment, Forest and Climate Change (MoEF&CC), Government of India, New Delhi and declared as one of the 93 significant wetlands in Asia by the Asian Wetland Bureau. This lake has also been declared as first bird sanctuary in Puducherry by the Government of Puducherry in 2008. The Ousteri lake attracts a number of plants and animal diversity, but largely remain un-recorded. With this book, the authors have attempted to record the reptilian and anuran diversity in and around Ousteri lake – represented by Testudines (Terrapins & Tortoises) with 2 species; Squamates (Lizards) with 10 species; Ophidia (Snakes) with 19 species and also 17 different Anuran species.

Worldwide, reptiles and anuran species are declining at an unprecedented rate due to many reasons, hence the need of conserving these species is of prime importance. Management of reptiles requires an integrated landscape approach that incorporates habitats and connections among these at multiple spatial scales, rather than a species-oriented focus. Species assemblages depend not only upon multiple habitat features within landscapes, but also by multiple stressors, necessitating management approaches that influence all aspects of habitat. Hence, in addition to sound science, a multi spectral approach including public interest is critically important for a successful and effective conservation.

I envisage this book will be highly useful to the managers, conservationists, researchers and young students to conceptualize ideas and develop their imagination on the available diversity of reptiles and anuran species in and around Ousteri lake. I commend and congratulate to all the team members on their efforts to prepare this book.

Place: Puducherry

Date:

Dr. S. Dinesh Kannan, IFS

Index

Snakes

Venomous

Sl.No	Common Name	Scientific Name	Page No.
1.	Common Krait	<i>Bungarus caeruleus</i> (Schneider, 1801)	3
2.	Russell's Viper	<i>Daboia russelii</i> (Shaw & Nodder, 1797)	4
3.	Saw-Scaled Viper	<i>Echis carinatus</i> (Schneider, 1801)	5
4.	Spectacled Cobra	<i>Naja naja</i> (Linnaeus, 1758)	6

Non-Venomous

Sl.No	Common Name	Scientific Name	Page No.
1.	Brahminy Blind Snake	<i>Indotyphlops braminus</i> (Daudin, 1803)	7
2.	Bronzeback Tree Snake	<i>Dendrelaphis tristis</i> (Daudin, 1803)	8
3.	Buff Striped Keelback	<i>Amphiesma stolatum</i> (Linnaeus, 1758)	9
4.	Common Kukri Snake	<i>Oligodon arnensis</i> (Shaw, 1802)	10
5.	Common Sand Boa	<i>Eryx conicus</i> (Schneider, 1801)	11
6.	Common Vine Snake	<i>Ahaetulla nasuta</i> (Lacépède, 1789)	12
7.	Common Wolf Snake	<i>Lycodon aulicus</i> (Linnaeus, 1758)	13
8.	Indian Rat Snake	<i>Ptyas mucosa</i> (Linnaeus, 1758)	14
9.	Olive Keelback Wart Snake	<i>Atretium schistosum</i> (Daudin, 1803)	15
10.	Rainbow Mud Snake	<i>Enhydris enhydris</i> (Schneider, 1799)	16
11.	Red Sand Boa	<i>Eryx johnii</i> (Russell, 1801)	17
12.	Russell's Kukri	<i>Oligodon taeniolatus</i> (Jerdon, 1853)	18
13.	Vellore Bridle Snake	<i>Lycodon nympha</i> (Daudin, 1803)	19

Lizards

Sl.No	Common Name	Scientific Name	Page No.
1.	Brahminy Skink	<i>Eutropis carinata</i> (Schneider, 1801)	20
2.	Common House Gecko	<i>Hemidactylus frenatus</i> (Duméril & Bibron, 1836)	21
3.	Fan-Throated Lizard	<i>Sitana ponticeriana</i> (Cuvier, 1829)	22
4.	Indian Chameleon	<i>Chamaeleo zeylanicus</i> (Laurenti, 1768)	23
5.	Indian Monitor Lizard	<i>Varanus bengalensis</i> (Daudin, 1802)	24
6.	Oriental Garden Lizard	<i>Calotes versicolor</i> (Daudin, 1802)	25
7.	Spotted Supple Skink	<i>Lygosoma punctata</i> (Gmelin, 1799)	26
8.	Termite Hill Gecko	<i>Hemidactylus triedrus</i> (Daudin, 1802)	27
9.	White-Spotted Supple Skink	<i>Lygosoma albopunctata</i> (Gray, 1846)	28

Turtle

Sl.No	Common Name	Scientific Name	Page No.
1.	Indian Flapshell Turtle	<i>Lissemys punctata</i> (Bonnaterre, 1789)	29

Anurans

Sl.No	Common Name	Scientific Name	Page No.
1.	Asian Common Toad	<i>Duttaphrynus melanostictus</i> (Schneider, 1799)	30
2.	Indian Painted Frog	<i>Uperodon taprobanicus</i> (Parker, 1934)	31
3.	Green Pond Frog	<i>Euphlyctis hexadactylus</i> (Lesson, 1834)	32
4.	Indian Bullfrog	<i>Hoplobatrachus tigerinus</i> (Daudin, 1803)	33
5.	Indian Burrowing Frog	<i>Sphaerotheca breviceps</i> (Schneider, 1799)	34
6.	Indian Cricket Frog	<i>Fejervarya limnocharis</i> (Gravenhorst, 1829)	35
7.	Indian Marbled Toad	<i>Duttaphrynus stomaticus</i> (Lutken, 1864)	36
8.	Indian Skipper Frog	<i>Euphlyctis cyanophlyctis</i> (Schneider, 1799)	37
9.	Indian Tree Frog	<i>Polypedates maculatus</i> (Gray 1830)	38
10.	Jerdon's Bullfrog	<i>Hoplobatrachus crassus</i> (Jerdon, 1853)	39
11.	Marbled Balloon Frog	<i>Uperodon systoma</i> (Schneider, 1799)	40
12.	Ornate Narrow-Mouthed Frog	<i>Microhyla ornata</i> (Duméril and Bibron, 1841)	41
13.	Termite Nest frog	<i>Uperodon variegatus</i> (Stoliczka, 1872)	42

Introduction

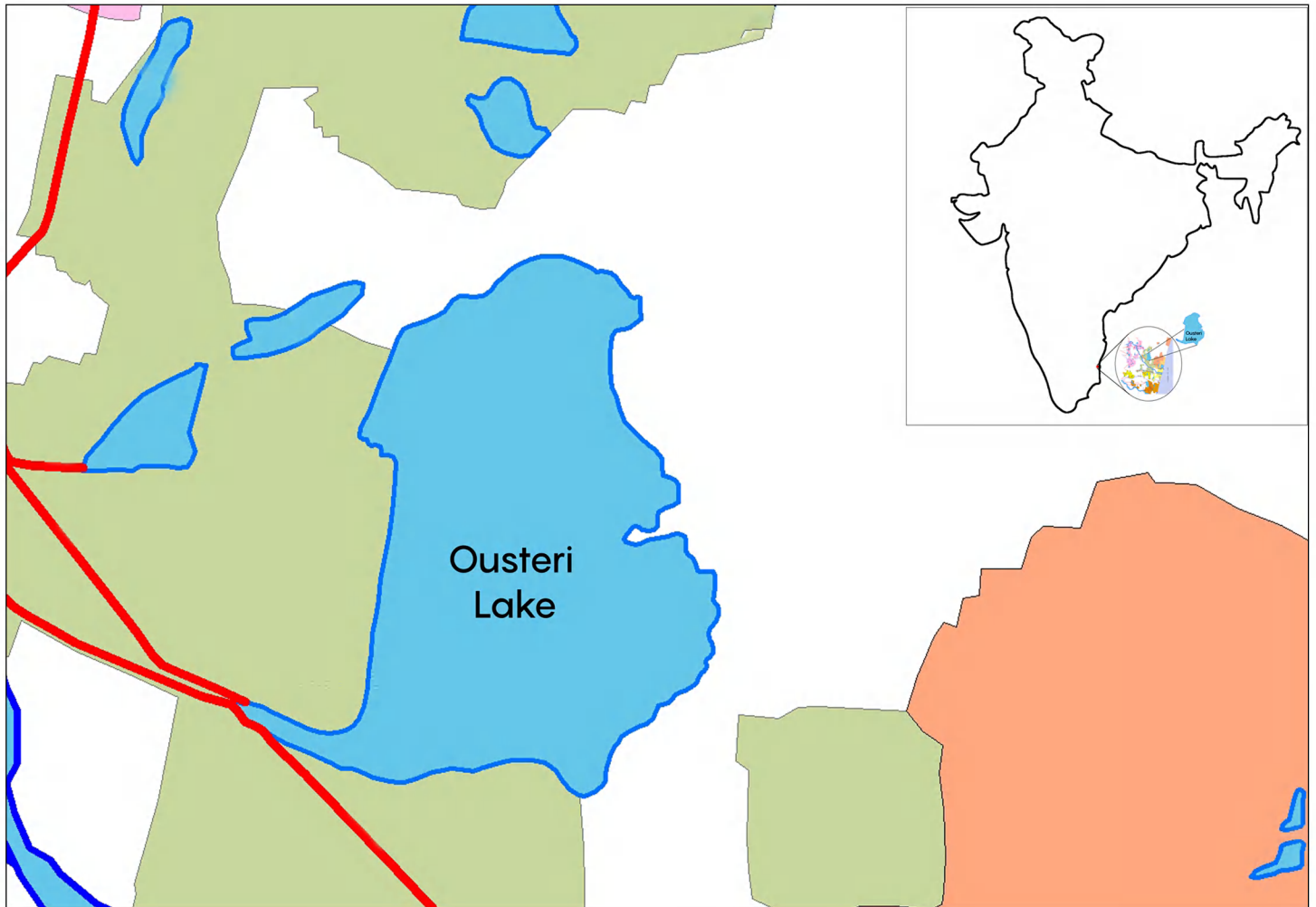
Freshwater wetlands are very fragile and constitute a treasure of biodiversity. The wetland ecosystem forms an important environment for aquatic, semi-aquatic and moisture loving floral and faunal associations. Wetlands play an integral role in the ecology of a watershed. Their shallow waters, nutrients and primary productivity are ideal for organisms that form the base of the food web upon many species of wildlife depend. Wetland habitat provides the necessary food, water and shelter for mammals, migrating birds, amphibians and reptiles.

Reptiles are found in almost all the parts of the world, except the extremely cold regions. The diversified climate, varying vegetation and different types of soil in the country form a wide range of biotopes that support a highly diversified reptilian fauna. Indian reptiles consist of 500 species in numbers; have a good representation of endemics (Molur & Walker, 1998). Nearly 44% of the assessed reptiles are endemic to India (Molur & Walker, 1998). Reptiles play an important role as primary, midlevel and top consumers in an ecosystem and hence maintain the ecological balance in many ecosystems. They keep several pests such as insects and rodents in control by feeding on them. The Ousteri lake riparian zone provides habitat for a diverse flora and fauna. The vegetation surrounding the lake helps to shade the water, mitigating water temperature changes. Over 160 plant species were recorded in the Ousteri lake riparian zone (Abbasi, 1997). These plant species provide a rich habitat for many reptiles and anurans.

Study Area

Ousteri is the largest lake in Puducherry and one of the important wetlands of Asia (Alexander, 2010). It is located between Lat 11°56.85' N – Long 79°44.22' E and spreads over 800 ha. partly in Puducherry and partly in Tamil Nadu. It is a large shallow wetland situated along the eastern boundary of Puducherry. The lake depends on its catchment for 75% of its water; the rest comes from the diversion channels of Suthukeni. Ousteri lake is one of the internationally important sites for migratory birds; it's most valuable use for irrigation for the nearby farming lands and for ground recharge. The Lake is declared as a bird sanctuary by the Government of Puducherry and it also identified as Important Bird Area (BirdLife International, 2004). The Ousteri lake region experiences a mean annual temperature of 30.0°C and mean annual rainfall concerning 1311–1172 mm. The climate is tropical dissymmetric with the majority of the rainfall during the Northeast Monsoon, in the months of October to December.

Ousteri lake supports diverse flora and fauna. The flora in and around the lake consists of 191 herbs, 103 trees, 20 stragglers, 40 climbers and 63 grass species. The avifaunal diversity was recorded as 166 species combining both resident and migratory. Sixty three species of butterflies were recorded in this lake. The 25 fish species were found including native and introduced (CMAP Report, 2011). In recent times, the lake is under serious threats, it has exposed to various anthropogenic threats such as habitat loss, encroachment for agricultural activities, industrial growth, eutrophication, real estate expansions. Hunting and poaching were prevalent in the Ousteri bird sanctuary (CMAP Report, 2011, Azeez & Prusty, 2008, Azeez *et al.* 2007).



Location of Ousteri lake in Puducherry

Reptile Diversity

The present reptile assessment is a review of the known reptiles belonging to the region in and around of Ousteri lake. Reptiles play an important role as primary, midlevel and top consumers in an ecosystem. They maintain the ecological food chain in many ecosystems due to their diet of insects and small rodents and thereby contributing to control of these animals that are pests in crops and homes. The Ousteri lake has the high reptile diversity due to its diverse that are usually considered as vegetation types. The reptilian groups of Ousteri lake are represented by Testudines (Terrapins & Turtles) and Squamates including Sauria (Lizards) and Ophidia (Snakes). A total of 30 species of reptiles belonging to 13 different families have been recorded so far.

The identification of reptiles was done with the help of Daniel (1997), Das (2003), Whitaker and Captain (2004). All the reptile species have been evaluated for their global conservation status according to the IUCN categorization. The species accounts of the listed reptiles was done with the help of 'The Reptile Database', 'India Biodiversity Portal' and 'Reptiles of India' online databases.

Venomous Snakes

Common Krait

Bungarus caeruleus (Schneider, 1801)

Tamil Name: கட்டுவிரியன்



Photo Credit: Biswajit Harpal

Description:

It is a highly venomous snake capable for delivering neurotoxic bites. It is also the member of 'Big Four' of India. They have depressed head with rounded snout. It possess glossy blue-black slender body with fine milky white bands, with a milky white belly. The average length of common krait is 90 cm (3.0 ft), but it can grow upto 175 cm (5 ft 9 in).

Distribution:

All over the India including North-East states. Not found in Islands. Also found in Bangladesh, Nepal, Pakistan and Sri Lanka.

Habitat & Ecology:

It occupies variety of forests including rainforest; dry, moist, mixed deciduous forest, scrub forest, wetlands, grasslands. It lives in almost all kinds of habitat suitable for snakes this includes urban settlement, dense & open forest, hills, agricultural lands, rocky terrain. It is exclusively a nocturnal species and shows activity from late evening to early morning.

Food: It feeds majorly on other snakes and rodents, frogs, toads and lizards.

Major Threats:

Often get killed due to its highly venomous nature and in road accidents.

Status: It is common in the study area.

IUCN Red List Status: Lower Risk (LR). ■

Russell's Viper

Daboia russelii (Shaw & Nodder, 1797)

Tamil Name: கண்ணாடி விரியன்



Photo Credit: Alexander

Description:

It is the most commonly occurring member of the Viper family in India, notorious for its mysterious whistle and long fangs. It has one of the most lethal bites of venomous snake in the Indian subcontinent and is a part of the Indian 'Big Four'. This species is characterized by having an obtuse snout with prominent Canthus rostrails (the angle between the flat crown of the head and the side of the head between the eye and the snout). Dorsal (upper parts) coloration is lightened to sandy, with a vertebral series of 23–29 large, oval, chestnut spots, with black or dark brown margins narrowly edged with cream colour. A light V shaped mark with its apex on top of snout; chin and throat are whitish, but in many individuals the scales of this area are tipped with black. They measure between 250–300 mm (25–30 cm).

Distribution:

India, Elsewhere: Sri Lanka, Pakistan, Eastern Himalayas, Burma, Thailand and many parts of Indo-Chinese region.

Habitat & Ecology:

This species inhabits the plains, foothills and uplands up to 2500 meters, grasslands, cultivated fields, bushes near the marshy areas. These are generally nocturnal, sluggish, ill tempered. Young ones are born in June, the number generally remains between 20 – 25 in a single litter.

Food: Food comprises small rodents and frogs.

Major Threats:

This venomous species is persecuted by humans when encountered due to its highly venomous nature.

Status:

Though this species is common in the study area, it is rarely sighted due to its nocturnal habit.

IUCN Red List Status: Lower Risk-near threatened/Nationally (LRnt/N).



Saw Scaled Viper

Echis carinatus (Schneider, 1801)

Tamil Name: புல் விரியன்



Photo Credit: Alexandar

Description:

It is a venomous viper species with keeled dorsal scales, smallest member of the big four snakes that are responsible for causing the most snake bite cases and deaths in India. They are highly inconspicuous in nature. Head distinct from neck, snout very short and rounded. The colour-pattern consists of a pale buff, greyish, olive or pale brown ground colour, overlaid mid dorsally with a series of variably coloured, but mostly whitish spots, edged with dark brown, and separated by lighter inter blotch patches. A series of white bows run dorso-laterally. The belly is whitish, uniform in colour or with brown dots that are either faint or distinct. The size ranges between 38 and 80 cm (15 and 31 in) in total length (including tail), but usually not more than 60 cm.

Distribution:

It is distributed throughout the Indian mainland.

Habitat & Ecology:

It occupies sandy rocky terrains, open grassy areas and scrub jungles. Hides in mounds, holes, piles, caves, cracks, dense leaf litters. The population of this

species is ovoviviparous (Eggs hatch inside the body).

Food:

They have a generalist diet which includes rodents, lizards, frogs and a variety of arthropods.

Major Threats:

Due to habitat loss, road kills and killings due to high venom potency.

Status: Population is not evaluated but commonly sighted in the study area.

Spectacled Cobra

Naja naja (Linnaeus, 1758)

Tamil Name: நல்ல பாம்பு



Photo Credit: Alexandar

Description:

It is one of the most famous snake in Indian subcontinent. Slender body with smooth oval shaped scales. Head is not broader than neck. The spectacled mark on the back of the hood appears when stretched on provocation. The ventral scales or the underside colouration of this species can be grey, yellow, tan, brown, reddish or black. Dorsal scales of the Indian cobra may have a hood mark or colour patterns. Salt-and-pepper speckles, especially in adult specimens, are seen on the dorsal scales (upper body). Belly colour depends on dorsal colour and ranges from milky white, white mixed with purple and yellow. A fully grown adult can range between 100 to 150 cm (1000 mm to 1500 mm)

Distribution:

It is widely distributed throughout India.

Habitat & Ecology:

It is a venomous snake, forages in dense & open forests, agricultural lands, around wetlands and near to human settlements. It is often active during night. It is oviparous (lay eggs) with a clutch size varies from 8 — 30 during late summer to the most of monsoon.

Food: Mainly feeds on rodents, lizards, toads and frogs.

Major Threats:

Often gets killed due to its aggressive behaviour, road kills, often exploited by snake charmers, hunted and poached for its skin.

Status: It is common in the study area.

IUCN Red List Status: Lower Risk-near threatened/Nationally (LRnt/N). ■

Non-Venomous Snakes

Brahminy Blind Snake

Indotyphlops braminus (Daudin, 1803)

Tamil Name: புழு பாம்பு



Photo Credit: Alexandar

Description:

This is one of the world's smallest and harmless snakes, rarely exceeding 20 cm in length. Body is thin and dark brown to black in colour throughout. Its head is barely differentiated from the body, and the tiny eyes appear as black dots. Virtually blind this snake can, however, distinguish between light and dark. The tail is short and blunt and bears a short, sharp spine.

Distribution:

The species ranges throughout Southeast Asia, and has populated other parts of the world including the Middle East, Africa and the U.S.

Habitat & Ecology:

A very common, but rarely seen species. It spends much of its time burrowing in soil and leaf litter. They may be encountered when digging in soil, when turning over logs or rocks or after a heavy downpour when they are forced to the ground surface. The species is the only known parthenogenetic snake i.e. all specimens are female and reproduction is asexual.

Food:

It feeds on small invertebrates, mainly ant larvae and pupae.

Major Threats:

No known threats.

Status:

Quite a stable population.

IUCN Red List Status: Lower Risk (LR) ■

Bronzeback Tree Snake

Dendrelaphis tristis (Daudin, 1803)

Tamil Name: கொம்பேறிமூக்கன்



Photo Credit: Alexander

Description:

It is a long, slender snake with a pointed head and a bronze coloured line running right down its back. Dorsal colour brown, blackish or purplish black. Belly colour generally yellowish white or greenish white. It has large eyes with round pupils. The average length of an individual can be around 100 cm (1000 mm) while maximum length can be up to 169 cm (1690 mm).

Distribution:

Endemic to Indian subcontinent.
Distributed widely in India.

Habitat & Ecology:

It is a non-venemous diurnal arboreal species. It is camouflaged among the leaves because of its uniform ruddy brown skin. This active snake is restless and quick, both on the ground as well as in the trees. It lays its eggs between September and February with a clutch size of 6 - 7 eggs.

Food:

It's diet includes geckos, birds and occasionally frogs.

Major Threats:

Habitat destruction and road kills.

Status:

It is common in the study area.

Buff Striped Keelback

Amphiesma stolatum (Linnaeus, 1758)

Tamil Name: நீர்க்கடன் பாம்பு



Photo Credit: Alexandar

Description:

Though it is non-venomous, it is an aggressive snake. A fully grown individual can reach up to a length of about 35 cm (350 mm). Dorsal (upper body) colouration is olive-brown or somewhat greenish; with a pair of pale yellow stripes, which sometimes break up into spots in the anterior region of the body; the space between these stripes is with dark-brown to black spots. Belly glossy white with reddish or greyish tint on side near dorsals (upper body).

Distribution:

India, South-East Asia and China.

Habitat & Ecology:

It is a diurnal and terrestrial species often shy and non-offensive, mostly lives in moist vegetation of agricultural lands, gardens, open forests and prefers low lying areas. It is oviparous most of the new born seen from monsoon to late winters, female lays up to 15 eggs.

Food:

It feeds mainly on amphibians like toads and frogs.

Major Threats:

Road kills, habitat loss and decline in the population of their major prey, amphibians.

Status:

It is common in the study area.

IUCN Red List Status: Lower Risk-near threatened/Nationally (LRnt/N)



Common Kukri Snake*Oligodon arnensis* (Shaw, 1802)**Tamil Name:** ஓலை பாம்பு

Photo Credit: Alexandar

Description:

A non-venomous snake which can grow up to 65 cm (650 mm). Snout pointed with a broad A-shaped rostral, head somewhat if not wider than the body. Glossy slender body with smooth scales. Dorsal coloration (Upper body) is reddish-brown or purple, with distinct cross-bars or transversely arranged spots; ventrum (the under surface) is whitish, uniform with faint lateral spots; head with v-shaped marks.

Distribution:

Gujarat (Vadodara, Bharuch, Gandhinagar, Bhavnagar and Dangs districts); Peninsular India, Western Himalayas, Bengal. Elsewhere: Sri Lanka, Pakistan, (Baluchistan, Sind, North West Frontier Provinces); Nepal.

Habitat & Ecology:

It is most agile, diurnal snake, inhabiting the masonry work of old buildings and rocky areas around them; it is quite common in plains also. It is very shy in the habit of concealing, when alarmed. It is an oviparous snake.

Food:

Its food comprises insects, grubs, spiders, small reptiles and their eggs, amphibians, birds and their eggs, small rodents (mice).

Major Threats:

Habitat loss, killing due to misidentification with Banded Krait and road kills.

Status:

Common in the study area.

IUCN Red List Status: Lower Risk-least concern (LRlc).



Common Sand Boa

Eryx conicus (Schneider, 1801)

Tamil Name: மண்ணுளி பாம்பு



Photo Credit: Alexander

Description:

Non venomous species, have short and very thick body which is full of irregular patches of dark brown blotches on a yellowish or brownish grey ground colour which are usually continuous dorsally (on the upper body). The head is covered with small scales. The eye is small with a vertical pupil. The dorsal scales are small and keeled. The belly is uniform white. Tail remains very short, thick and covered with highly keeled scales of dry appearance. Adults can grow upto a total length of 99 cm (990 mm).

Distribution:

Endemic to Indian subcontinent. Distributed widely in India, Nepal, Pakistan and Sri Lanka.

Habitat & Ecology:

It is a nocturnal and burrowing snake species. Lives mostly in open lands and sandy substrate areas. The reproduction is viviparous (gives birth to live young), female gives birth to 5-14 young during summer to pre-monsoon.

Food:

It feeds mainly on rodents and small mammals.

Major Threats:

Often killed due to misidentification with venomous snakes like viper species; road kills. It is subject to the commercial exploitation on account of its edible use.

Status:

Common in the study area but less frequently sighted.

IUCN Red List Status: Lower Risk-near threatened (LRnt).



Common Vine Snake (Green Tree Snake)

Ahaetulla nasuta (Lacépède, 1789)

Tamil Name: பச்சைப் பாம்பு



Photo Credit: Biswajit Harpal

Description:

It is a mildly venomous species, can be identified easily by very thin and long body including tail, leaf or arrow like head with very pointed snout. Oval shape eyes with horizontal pupils. Dorsal (upper body) colouration is parrot green or bluish-green, with entirely yellow-green belly without any pattern.

Distribution:

It is found in whole mainland including north-east states of India, except Thar desert.

Habitat & Ecology:

It can be found in hills as well as in plains. It occupies variety of forests including mixed, dry and moist deciduous forests. Locomotion is fast in arboreal environment while slow on land. It is assumed to be capable for mating in most of the year. Female directly gives birth to 23 (maximum) young in dense bushes from monsoon to most of winters. Males can range between 156 - 180 cm (1560 - 1800 mm) while females can range between 135 - 142 cm (1350 - 1420 mm) in length.

Food:

It feeds on variety of prey including lizards, birds, frogs, other snakes, geckos and rodents.

Major Threats:

Habitat loss as it's mainly an arboreal species, killing due to misidentification and road kills.

Status:

It is common in the study area.

IUCN Red List Status: Lower Risk-near threatened (LRnt).



Common Wolf Snake

Lycodon aulicus (Linnaeus, 1758)

Tamil Name: வெள்ளிக்கோல் வரையன்



Photo Credit: Biswajit Harpal

Description:

It is a medium size non-venomous nocturnal species with yellowish white bands on brown dorsals. Body is slender with smooth and shiny scales, with flattened head broader than neck.

Distribution:

It is found in peninsular India and Sri Lanka.

Habitat & Ecology:

It inhabits forests and human habitations. It shows activity both on ground and heights of rocks. It is usually shy, but alert and aggressive when provoked.

Food:

It feeds mainly on geckos, small size rodents and skinks.

Major Threats:

Often gets killed due to misidentification with the venomous snake, Krait and in road accidents.

Status:

This population status is not known.



Indian Rat Snake

Ptyas mucosa (Linnaeus, 1758)

Tamil Name: சாரைப் பாம்பு



Photo Credit: Latchoumycandane

Description:

It is a non-venomous, highly agile and fast moving snake. It's body is slender, cylindrical, has a long head which is quite distinct from the neck; total body length reaches up to 280 cm (2800 mm) in males and 230 cm (2300 mm) in females; snout obtusely pointed; scales of the body are feebly keeled. Dorsal (upper body) colouration is olive green, brown, yellowish, grey, dull tan, dark olive brown, many posterior scales are with black tips and edges, other anterior scales are with yellow or light tan edges. Belly color also depends on color of the dorsal (upper body); from pale yellow or white mixed with green. It possess a long and slender tail.

Distribution:

All over India, as well as the Northeast and Andaman Islands. Also found in several parts of South-East Asia from Afghanistan to the east.

Habitat & Ecology:

It is most active, diurnal snake, occurs in varied habitats like plains, agricultural fields, grasslands, trees and hollows in them under dead wooden logs, under stones, crevices in rocks, old inhabited houses. Behaviour fast, alert and very quick to respond. The breeding season starts in April and extends up to September.

Food: It's food comprises of small mammals, birds, reptiles, eggs of the birds and amphibians.

Major Threats:

Killing due to misidentification with venomous snakes like Cobra species. It is subject to the commercial exploitation on account of its large scale killing for skin and edible use.

Status: It is a common snake in the study area.

IUCN Red List Status: Lower Risk-near threatened/Nationally (LRnt/N).



Olive Keelback Wart Snake

Atretium schistosum (Daudin, 1803)

Tamil Name: தண்ணீர் பாம்பு



Photo Credit: Alexandar

Description:

It is a diurnal and freshwater aquatic species with keeled scales. Head has smooth scales. It has a rounded snout. Dorsal (Upper body) colour is olive brown or slaty-grey uniform. It has two series of small black spots along the back; a more or less distinct dark lateral streak sometimes present; upper lip, outer row of scales and lower surfaces are yellow or white (Non-venomous). Females can grow up to 75 cm (750 mm) while males up to 60 cm (60 mm).

Distribution:

Endemic to Indian subcontinent. Recorded from India, Nepal and Sri Lanka.

Habitat & Ecology:

Common among vegetation near freshwater and has been found in proximity to saline pools and lagoons. It is reported at times to ascend bushes. When disturbed it erects its fore-body well off the ground and flattens its neck (Sliva, 1980). Oviparous; lays 12 to 30 eggs at a time.

Food:

It feeds mainly on fish and frogs.

Major Threats:

Road kills and destruction of wetlands and wet vegetation around water bodies.

Status:

Though this species is common in the study area it is not frequently sighted.

IUCN Red List Status: Lower Risk-least concern/Nationally (LRlc/N).



Rainbow Mud Snake

Enhydris enhydris (Schneider, 1799)

Tamil Name: தண்ணீர் சாரைப் பாம்பு



Photo Credit: Alexander

Description:

It can be identified by checking dark stripes or series of dots on robust, stout body with smooth rhomboidal shape scales. Dorsal (upper body) colouration is olive brown or greenish with longitudinal stripes along the body. Belly colours yellowish white. Head remains small, scarcely broader than neck with obtusely rounded snout. The average length of an individual is usually 50 cm (500 mm). Males and females can grow up to a total length of 70 cm (70 mm) and 88 cm (880 mm) respectively.

Distribution:

South-East Asia, distributed widely in India.

Habitat & Ecology:

It is a non-venomous, diurnal and crepuscular snake. It lives in a variety of stagnant aquatic environments. This is one of the most common paddy field species.

Food:

This species feeds almost exclusively on fishes (Murphy, 2007) and sometimes also prey on frogs and tadpoles.

Major Threats:

Population of this snake and other fresh water mud snakes is declining due to pollution and chemicals in water bodies. In many regions it is killed for edible use.

Status: Uncommon in the study area.

Red Sand Boa

Eryx johnii (Russell, 1801)

Tamil Name: சிகப்பு மண்ணுளி பாம்பு



Photo Credit: Alexandar

Description:

Body is slender with small, keeled but smooth appearing scales. It's coloration is almost uniform brown, reddish brown, reddish black, chocolate brown in adults. Juveniles have reddish and blackish coloured banded pattern, which is more prominent on the posterior (rear) body. Head is depressed on snout with smooth scales which is not broader than neck. Eyes small and with vertical pupil. Tongue colour red. It is having very small and thick tail which ends with a blunt head like tip (thus the famous name two headed snake). The average and maximum length of an individual can be 70 cm (700 mm) and 100 cm (1000 mm) respectively.

Distribution:

It is distributed widely in India.

Habitat & Ecology:

It occupies regions with dry and sandy soil, which includes agricultural lands, gardens, unused lands having deep cracks and rat holes. It shows nocturnal and burrowing behaviour. It is viviparous (bears live ones) in nature, female directly gives birth to 4-14 young during post summer to monsoon months.

Food: It feeds on rodents, other small snakes and lizards.

Major Threats:

Road kills and fatality during agricultural and other digging activities as it's a burrower. In some parts of country its consumed for edible and medicinal use.

Status: Population is not known to be assessed but commonly encountered in the study area.

IUCN Red List Status: Lower Risk-near threatened (LRnt).



Russell's Kukri

Oligodon taeniolatus (Jerdon, 1853)

Tamil Name: கண்ணாடி விரியன் ஓலை பாம்பு



Photo Credit: Ravichandra Mondreti

Description:

The body of this species is slender covered with glossy and smooth scales. Head is usually marked with chevron shaped (an inverted 'V' mark), a thick bent band joining eyes and thick collar behind the arrow mark. A light colour vertebral line running transversally which is guarded by series of regular black and white oblique streak from neck to tail. Belly is plain white in the commonest form. Its average length can be 45 cm (450 mm) while maximum can be 59 cm (590 mm).

Distribution:

It is distributed throughout India.

Habitat & Ecology:

It is a non-venomous and nocturnal snake, usually terrestrial in nature. It lives both in dense and open forests, gardens, agricultural lands. Female lays upto 9 eggs during monsoon months.

Food: It feeds on small reptiles like small lizards, amphibians, eggs and insects.

Major Threats:

Often gets killed due to misidentification with the venomous species, the Saw-Scaled Viper; road kills.

Status: Population status is not clear.

IUCN Red List Status: Lower Risk-least concern (LRlc).



Vellore Bridle Snake

Lycodon nympha (Daudin, 1803)

Tamil Name: வேலூர் அலங்கார பாம்பு



Photo Credit: Alexandar

Description:

This snake is often confused with the common krait. The presence of a loreal between eye and nostril shield can be used to distinguish it from kraits. Snout broad, much depressed, long, spatulate, with the upper lip, and without canthus rostralis. Slender body with smooth & shiny scales, dorsal (the upper body) is brown or blackish-brown in colour with yellow or white bands present starting from neck; belly glossy white. Tail is thin, long and slender ends with a pointed tip. Individuals can grow upto a maximum length of 50 cm (500 mm).

Distribution:

Endemic to Indian subcontinent, found mainly in Peninsular India to Odisha.

Habitat & Ecology:

It is a non-venomous snake, habituated in forests and near to human settlements in search of prey. Little known about its ecology and reproduction behaviour.

Food:

It mainly feeds on lizards and small frogs.

Major Threats:

Often gets killed due to misidentification with venomous species such as Common krait; road kills.

Status: Not common and not evaluated.

Lizards

Brahminy Skink

Eutropis carinata (Schneider, 1801)

Tamil Name: அரணை



Photo Credit: Alexander

Description:

Body of this species is very robust with a moderately obtuse snout. Dorsally (upper body) is brown or olive-brown in colour, uniform or with small black spots or longitudinal lines; sides darker, with or without lighter spots; belly remains yellowish white. During breeding-season males gets a scarlet band from shoulder to thigh. Its average length is usually 25 cm while maximum length could be upto 37 cm.

Distribution:

India, Bangladesh, Nepal, Maldives and Sri Lanka.

Habitat & Ecology:

This species can be seen in many habitat types including rain forests, deserts, scrub forests and even in parks and gardens. It is mostly diurnal, often seen basking or foraging in open areas. It is oviparous (lays eggs) in clutches of 2-20.

Food:

Crickets, caterpillars, beetles, and earthworms and even small vertebrates are known to be consumed.

Major Threats:

Habitat loss may affect the population but it's not known.

Status:

The population status is not available.

IUCN Red List Status: Least Concern (LC). ■

Common House Gecko

Hemidactylus frenatus (Duméril & Bibron, 1836)

Tamil Name: வீட்டு பல்லி



Photo Credit: Alexander

Description:

These small geckos are non-venomous and not harmful to humans. They usually range between 75 – 150 mm (7.5—15 cm) in length. Heads are large with smooth dorsal scales while fingers lack webbing. Its a tropical gecko, thrives in warm, humid areas where it can crawl around on rotting wood in search of the insects it eats, as well as within urban landscapes. The animal is very adaptable and may prey on insects and spiders, displacing other gecko species which are less robust or behaviourally aggressive.

Distribution:

India, Bangladesh, Bhutan, China, Myanmar, Nepal, Pakistan and Sri Lanka.

Habitat & Ecology:

It inhabits in open forested areas and in and near to human settlements. It's a generalist predator on small invertebrates and vertebrates.

Food: Crickets and insects, supplemented by fruit flies, small flies, mealworms, and silkworms.

Major Threats:

There are no known threats for this species.

Status:

This species is common in the study area.

IUCN Red List Status: Lower Risk-least concern/Nationally (LRlc/N).

Fan - Throated Lizard

Sitana ponticeriana (Cuvier, 1829)

Tamil Name: விசிரி தோண்டாய் ஒனன்



Photo Credit: Alexander

Description:

It is small to medium size lizard. The largest specimen recorded was 20.5 cm (7.9 inches). Olive-brown above, with a series of rhomboidal spots along the middle of the back. Tail round, slender, one and a half to twice as long as the head and body, covered with equal keeled scales.

Distribution:

This species is widely distributed from Kanyakumari in Southern India to the Himalayan foothills in Nepal.

Habitat & Ecology:

It is a fast bipedal lizard with acute snout, inhabits moderately moist scrub, rocky and sandy coastal areas, open areas in dry forests and dry scrublands. It is primarily a ground-dwelling species, but sometimes found on trees. Oviparous (Lays eggs).

Food:

The most common food is invertebrates, namely beetles, spiders, and the caterpillars of moths and butterflies.

Major Threats:

Habitat loss is the major threat for this species.

Status:

It is common in the study area.

IUCN Red List Status: Lower Risk-near threatened/Nationally (LRnt/N).



Indian Chameleon

Chamaeleo zeylanicus (Laurenti, 1768)

Tamil Name: இந்திய பச்சோந்தி



Photo Credit: Alexander

Description:

Head with a distinct helmet like bony projection, a prehensile tail, fingers and toes opposable. Body can change colour rapidly according to habitat. They move slowly with a bobbing or swaying movement and are usually arboreal. They can grow upto a total length of 375 mm (37.5 cm).

Distribution:

It is widely distributed in both the Eastern and Western Ghats and in peninsular India.

Habitat & Ecology:

It occupies scrub forest, arid and semi-arid regions. Its shows oviparous reproduction behaviour.

Food:

Crickets, Worms including: silkworms, calcium worms, earth worms, buffalo worms, morios, butter worms, meal worms, wax worms, bamboo worms and pachnoda grubs.

Major Threats:

It is commercially hunted for both pet trade as well as for medicinal purposes. It is affected by frequent forest fires.

Status:

This species is common in the study area.

Indian Monitor Lizard

Varanus bengalensis (Daudin, 1802)

Tamil Name: இந்திய உடும்பு



Photo Credit: Alexander

Description:

It is a non-venomous, very agile and fast lizard with elongated and tapering snout. It can reach to 175 cm with a snout-to-vent length and tail of 100 cm. Dorsum colour (the upper body) varies from yellow, brown, wheatish or greyish black with light and dark spots absent in some individuals.

Distribution:

It is found in India, Afghanistan, Bangladesh, Bhutan, Myanmar, Nepal, Pakistan and Sri Lanka.

Habitat & Ecology:

It occupies variety of habitats ranging from grassland to primary forests, plantation and tea gardens. It takes refuge in tree holes and burrows. Its oviparous with a clutch size of 6-20 eggs.

Food:

It primarily feeds on fishes, amphibians, lizards and smaller animals.

Major Threats:

This species is possibly threatened by habitat destruction and hunted commercially for its skin and meat.

Status:

This species is common in the study area.

IUCN Red List Status: Lower Risk-near threatened/Nationally (LRnt/N).

Oriental Garden Lizard

Calotes versicolor (Daudin, 1802)

Tamil Name: தேட்டத்து ஓணான்



Photo Credit: Alexander

Description:

Body light brownish olive in color, but the lizard can change it to bright red, to black and to a mixture of both. During the breeding season, the male's head and shoulders turn from bright orange to crimson and throat black. Males also turn red-headed after a successful battle with rivals. Both males and females have a well-developed crest running from head to tail. It measures over 10 cm (3.9 in) in length from snout-to-vent. Total length including the tail is up to 37 cm (14.5 in).

Distribution:

Widely distributed in Southeast Asia, Southern China and Maldives.

Habitat & Ecology:

This species inhabits dry and moist forests, forest edges, human habitations and gardens, roadside vegetation and plantations. Its oviparous in nature; about 10-15 eggs are laid mostly buried in soil.

Food:

It mainly feeds on largely invertebrates and insect.

Major Threats:

There are no known threats for this species.

Status:

This species is common in the study area.

IUCN Red List Status: Lower Risk-least concern/Nationally (LRlc/N).



Spotted Supple Skink

Lygosoma punctata (Gmelin, 1799)

Tamil Name: மிருதுவான அரனை



Description:

It is also known as common dotted garden skink and has three narrow, white stripes and two white dorso-lateral bands; reddish brown tail with uniform vibrant scales and lower surfaces are uniformly yellowish-white. The red tail gets replaced by small spots with the age.

Distribution:

South-East Asia, distributed widely in India.

Habitat & Ecology:

This species is ground dwelling and quite commonly available near human settlements. It is oviparous (egg-laying), but not much is known about its reproduction behaviour.

Food:

It primarily feeds on small insects.

Major Threats:

Illegal use in traditional medicines.

Status:

Not evaluated, but occurs in the study area.

Termite Hill Gecko

Hemidactylus triedrus (Daudin, 1802)

Tamil Name: ஈசல் புற்று பல்லி



Photo Credit: Alexander

Description:

A medium sized fairly stout gecko, dorsum in a shade of light brown with paired, thin black edged white bands at regular intervals. Dorsal (upper body) scalation on trunk, granular, intermixed with enlarged, keeled tubercle rows arranged in fairly regular longitudinal series. It can grow upto a length of 170 mm (17 cm).

Distribution:

India, (Andhra Pradesh, Karnataka, Tamil Nadu, Kerala), Sri Lanka.

Habitat & Ecology:

It occupies spaces in open forested areas and human habitations. It shows oviparous behaviour.

Food:

It mainly feed on small size insects.

Major Threats: There are no known threats for this species.

Status:

There is no population status available for this species.

IUCN Red List Status: Lower Risk-near threatened/Nationally (LRnt/N).



White-Spotted Supple Skink

Lygosoma albopunctata (Gray, 1846)

Tamil Name: வெள்ளை புள்ளி மிருதுவான அரணை



Photo Credit: Alexander

Description:

A dark streak passes dorso-laterally (involving both the back and the sides of the body) from nostril to tail. Anterior portion of body spotted with white. Belly is yellowish white sometimes with dots. Its body is elongated with weak limbs. The snout is short and obtuse. The tail is thick and a little longer than head and body.

Distribution:

India, Nepal and Bangladesh.

Habitat & Ecology:

This species is found in moist vegetation, often seen hiding under rotten logs and rock piles. It prefers damp surroundings and may be found ploughing through loose soil in search of prey.

Food:

Beetles, spiders, caterpillars of moths and butterflies

Major Threats:

Habitat loss.

Status:

The population status is not known.

IUCN Red List Status: Lower Risk (LR). ■

Turtle

Indian Flapshell Turtle

Lissemys punctata (Bonnaterre, 1789)

Tamil Name: பால் ஆமை



Photo Credit: Alexander

Description:

Domed softshell turtle with plastral flaps. The flap-shelled name stems from the presence of femoral flaps located on the plastron. It has an oval shell with hinged anterior lobe of cream or pale yellow plastron (the bony plate forming the bottom of a tortoise or a turtle). The carapace length of this species has been known to ranges from 240 to 370 mm.

Distribution:

India, Pakistan, Nepal, Bangladesh and Myanmar.

Habitat & Ecology:

This species found in a variety of freshwater habitats (rivers streams, reservoirs, marshes, ponds, lakes, damp agriculture fields). The reproductive cycle of this species varies according to the geographic region and it is closely correlated with monsoon seasons and heavy rains.

Food:

The diet is just as varied and may include worms, snails, insect larvae, aquatic insects, crustaceans and water plants.

Major Threats:

Overexploitation, pollution and destruction of habitat.

Status:

The species population can be considered common and stable in India.

IUCN Red List Status: Lower Risk-near threatened/Nationally (LRnt/N).

Anurans

Asian Common Toad

Duttaphrynus melanostictus (Schneider, 1799)

Tamil Name: ஆசியத் தேரை



Photo Credit: Alexandar

Description:

Asian Common Toad can grow up to 200 mm (20 cm) in length. The body of this species is covered with warts elliptical parotid gland. It's snout is short and blunt and the space between the eyes is broader than the upper eyelid width. Dorsum or upperside is generally uniform grey of various shades, brown or reddish with dark spots (Khan, 2000). It's underside is unmarked or spotted.

Distribution:

It is widely distributed in Southeast Asia. The native distribution extends North from Pakistan through Nepal, Bangladesh, India, Sri Lanka, Southern China, Myanmar, Lao, Vietnam, Thailand, Cambodia, Malaysia, Singapore and Indonesia.

Habitat and Ecology:

Asian common toad is a terrestrial species found throughout tropical and sub-tropical open areas as well as near to human habitations and agricultural fields. It is a nocturnal species but also found active during the day. They can be located under ground cover such as rocks, leaf-litter and logs. The breeding gets initiated by the onset of monsoon, young are commonly seen during rains.

Food:

They mainly dine on invertebrates animals without a backbone including woodlice, slugs, caterpillars, flies, earthworms, and beetles

Indian Painted Frog

Uperodon taprobanicus (Parker, 1934)

Tamil Name: இந்திய வண்ண தவளை



Photo Credit: Alexandar

Description:

Uperodon taprobanicus ranges in size from 54–70 mm for males and 57–75 mm snout-vent length (SVL) for females. The body is stocky, with a small head and short, rounded snout. The dorsum is dark brown, sometimes with irregular yellowish-brown spots. A narrow dark lateral stripe is present from the rear of the eye almost to the groin. This lateral stripe is separated from the mid-dorsal dark brown coloration by a thick yellow or orange stripe, which may itself be punctuated with several spots. The belly is mottled dirty yellowish brown. Males have a black

Distribution:

India, Bangladesh, Cambodia, China, Hong Kong, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Nepal, Singapore, Thailand and Vietnam.

Habitat and Ecology:

Found in water logged paddy fields, swamps at degraded evergreen forest edges, in ponds with extensive aquatic vegetation and around human settlements. Generally breed during rainy season. During April–June, calling aggregations of *Uperodon taprobanicus* can be seen. It hide under burrows or vegetation and are nocturnal (Parker, 1934).

Food:

They mainly dine on invertebrates animals without a backbone including woodlice, slugs, caterpillars, flies, earthworms, and beetles.

Green Pond Frog*Euphlyctis hexadactylus* (Lesson, 1834)**Tamil Name:** பச்சை தவளை

Photo Credit: Alexandar

Description:

A large sized frog with olive green or green back and whitish under parts. Females may reach up to 130 mm (13 cm) in snout to vent length. Its skin is quite smooth and possess flat snout with large eardrum. This species have fully webbed toes with slender fingers pointing in front. Few individuals have yellow coloration on the sides and also possess a very thick pale-yellow dorsal stripe.

Distribution:

This species is widespread in India, Bangladesh and Sri Lanka.

Habitat and Ecology:

It is largely a aquatic species, inhabits many types of water bodies, and in various habitats such as fresh water pond, swamp and stagnant water pools. It also found next to human settlements and often in paddy fields.

Food:

Insects, spiders, fishes, crayfish, shrimps, other frogs, tadpoles, small snakes, slugs, and snails.

Indian Bullfrog

Hoplobatrachus tigerinus (Daudin, 1802)

Tamil Name: இந்திய பெரிய தவளை



Photo Credit: Alexandar

Description:

A very large semiaquatic frog. Females can reach a snout to vent length of 170mm. Males are usually smaller. The colour of dorsum (upper surface of the body) olive green or grey, with dark blotches, a light yellow vertebral streak. Limbs have dark bars, which may break in dark blotches. Posterior thighs are marbled with yellow and with black spots; a fine yellow line along upper surface of thigh, another on the inner side of calf. Ventrums are generally white in colour, throat sometimes contains feeble pigmentation. Hands without webbing, feet more or less fully webbed.

Distribution:

India, Afghanistan, Bangladesh, Bhutan, Myanmar, Pakistan and Sri Lanka.

Habitat and Ecology:

It is mainly aquatic, commonly found around freshwater bodies, including agricultural fields like paddy fields. It is mostly solitary and nocturnal, inhabiting holes and bushes near water bodies and streams.

Food:

This species are predominantly carnivorous.



Indian Burrowing Frog

Sphaerotheca Breviceps (Schneider, 1799)

Tamil Name: இந்திய துளை தவளை



Photo Credit: Alexandar

Description:

Indian burrowing frog are morphologically similar to other *Vandijkophrynus* species, but can usually be distinguished by their unspotted white ventrum and bright yellow flush over the dorsal surfaces of their feet.

Distribution:

It is endemic to South Africa and found in Southwestern and Southern part of Western Cape Province to extreme Southwestern Eastern Cape Province, from Nieuwoudtville in the West to Humansdorp in the East, along the coastal flats and Cape Fold Mountains from the sea level to 1,500 m.

Habitat and Ecology:

Sphaerotheca breviceps generally inhabit sandy soils in areas of high winter rainfall in the Fynbos Biome. Breeding occurs in shallow temporary pools in seasonally flooded fynbos or renosterveld vegetation types.

Food:

Wide range of insects and other invertebrates.

Indian Cricket Frog

Fejervarya limnocharis (Gravenhorst, 1829)

Tamil Name: இந்திய கிரிக்கெட் தவளை



Photo Credit: Alexandar

Description:

It has a pointed snout which projects beyond mouth with an oblique loreal. Generally grey-brown or olive in colour from the above. It has a V-shaped dark mark between its eyes and a yellow vertebral stripe.

Distribution:

Parts of southeast Asia and Indo-China.

Habitat and Ecology:

It inhabits most open wet habitat types, such as river floodplains, damped agriculture areas like paddy fields, ponds and marshes. Various protected areas support this species. It requires diverse wetland habitats for reproduction and larval development.

Food:

Insectivorous and eat mostly mosquitoes.

Indian Marbled Toad

Duttaphrynus stomaticus (Lütken, 1864)

Tamil Name: இந்திய பளிங்கு தேரை



Photo Credit: Alexandar

Description:

It is a medium-sized species, in which adults on average can measure 76mm. The head is generally broad without a bony cranial ridge. However, a spiny ridge is found on the tarsus. Brownish in colour from above with white on the upper body stripes and a speckled 'V' — shaped mark on its shoulder. Its flank and limbs are light brownish grey with white stripes and speckles.

Distribution:

This species is widely distributed in India, Bangladesh, Nepal and Pakistan.

Habitat and Ecology:

It can be found in a wide variety of habitats including grasslands, scrubland, open forest lands, damped agricultural land and near to human settlements. It is mostly nocturnal and known to be a highly adaptable species. They generally take shelter under rocks and crevices. It breeds in perennial and seasonal streams and mostly in slow-flowing streams.

Food:

Insects and mosquitoes.

Euphlyctis cyanophlyctis (Schneider, 1799)

Tamil Name: நீர்தத்தித் தவளை



Photo Credit: Alexandar

Description:

A aquatic frog of medium size, greyish or olive green colour dorsal with dark patches. Females may rarely reach 60 mm in snout to vent length, while males are usually much smaller. The underside remains white. It got its name as skipping frog by its unique ability of skipping over the surface of water. Dorsal skin is smooth or granulated and limbs possess dark large spots. They are often seen at the edge of bodies of water with their eyes above the water, rarely seen outside water.

Distribution:

This species ranges throughout much of South Asia including Southern Afghanistan and Sri Lanka. It is also present in South-Eastern Iran (westernmost part of its range).

Habitat and Ecology:

It is a very aquatic species found in swamps, pools and various other wetland habitats. Adults are generally found basking at the edge of the waterbodies and males call from within the water. Reproduction and its larval development takes place in suitable waterbodies.

Food:

Insects and mosquitoes.

Indian Tree Frog

Polypedates maculatus (Gray, 1830)

Tamil Name: இந்திய மரத் தவளை



Photo Credit: Alexandar

Description:

It is a medium-sized frog in which adult females and males grow up to 80 mm and 50 mm in snout-vent length respectively. This species has sandy brown to yellowish white with a distinct chocolate brown back band along the sides of the head and through the eyes. The snout is pointed with a rounded tip and the loreal region is concave. The eardrum is about three-fourth the size of the eye. Dorsum smooth, chin and chest smoothly granular, venter and underside of thigh granular. Males with single internal vocal sac and nuptial pad at base of first finger. This species starts breeding with rains in May and continuing well through October.

Distribution:

India, Bangladesh, Bhutan, Nepal and Sri Lanka.

Habitat and Ecology:

It is generally found on damp wet ground covered with undergrowth/ leaf-litter in the open areas of forests, without crown canopy but surrounded by trees. Calling males will always be located below the damped leaf-litter or undergrowth.

Food:

Flies, ants, crickets, beetles, and moths.

IUCN Red List Status: Least concern (LC). ■

Jerdon's Bullfrog

Hoplobatrachus crassus (Jerdon, 1853)

Tamil Name: பெரிய தவளை



Photo Credit: Alexandar

Description:

A large frog, snout-vent lengths of males: 60–90 mm and females: 70–135 mm. The color is dorsally olive or yellow with dark brown to black spots. Ventral color is white to yellowish. A yellow vertebral stripe is prominent in some specimen. A number of crossbands are present on the limbs. Belly and under surface of the limbs usually white in colour, throat and breast molted with black. This species looks very similar to *H. tigerinus* but can be distinguished by its shorter legs.

Distribution:

Widely distributed in the plains of India, Bangladesh, Nepal and Sri Lanka (the largest frog in the Island).

Habitat and Ecology:

It is a semiaquatic species, commonly found along rivers, reservoirs and marshes. They are found up to 460 m. They are mostly active at night looking for food. They can often be seen after heavy rains, when mating begins. The males call from watersides. They are usually seen in cultivated areas and around human settlements.

Food:

Worms, insects, crayfish, fishes, other frogs, snakes, small turtles, small mammals and even birds.

Status: Least concern (LC). ■

Marbled Balloon Frog

Uperodon systoma (Schneider, 1799)

Tamil Name: பளிங்கு பலூன் தவளை



Photo Credit: Alexandar

Description:

This species belongs to the narrow-mouthed frog family. It can grow up to 55 mm in snout-to-vent length. It possesses a small head and shows a very stout appearance. Dorsum (upper body) is generally olive in colour with yellow marbling. Belly and anal region is granular.

Distribution:

This species is widespread in South Asia and is found throughout much of Southern and Eastern India, North-Western India, and has also been recorded from North-Eastern Pakistan.

Habitat and Ecology:

It is associated with freshwater habitat. This is a completely fossorial species that buries itself in loose, moist soil. Specimens have been observed in dry forest areas, plains, home gardens and low-intensity agricultural areas. The adults surface only during the summer monsoons; during the dry months they retreat into the soil. Breeding takes place during the monsoon rains.

Food:

Insects and mosquitoes.

Ornate Narrow-Mouthed Frog

Microhyla ornata (Duméril & Bibron, 1841)

Tamil Name: அலங்கார குறுகிய வாய் தவளை



Photo Credit: Alexandar

Description:

It is a small cream colour frog with a pointed snout. Adults especially females rarely exceed 25 mm in snout-to-vent length. Dorsal skin smooth with colour varying from dark brownish to greyish colour with dark markings. The skin on the back is smooth, however there are some granulations.

Distribution:

India, Bangladesh, Bhutan, Nepal, Pakistan and Sri Lanka.

Habitat and Ecology:

It is sub-fossorial in habit and largely associated with wetland habitats, occupies scrub forest, grassland, agricultural land, pastureland and urban areas. It is also found in forest floor leaf-litter. It is mostly a nocturnal species but also active diurnally during the wet rainy season. It reproduces in temporary rain pools and other bodies of still water.

Food:

Insects and mosquitoes.

Termite Nest Frog

Uperodon variegatus (Stoliczka, 1872)

Tamil Name: ஈசல் புற்று தவளை



Photo Credit: Alexandar

Description:

It is also known as Marbled narrow-mouthed frog. The snout-vent length reaches maximum to 35 mm, females are slightly bigger than males. The colour of the dorsum is dark brown with irregular light brown and whitish dots on feet and fingers. The mature males generally have creamish coloured parts on the dark brown ground colour. The belly is whitish.

Distribution:

Tamil Nadu and Kerala in the south of India, northwards up to Maharashtra, Andhra Pradesh, Telangana, Odisha, Jharkhand and West Bengal.

Habitat and Ecology:

It is a nocturnal species, which mostly inhabits wetlands and dry scrub jungles. It is most easily found after heavy rain when mating begins as they largely breed in water. Males call from watersides, but it is very difficult to locate calling individuals, as they remain hidden amongst vegetation. During rainy season this species can be found near human settlements but very difficult to find during dry season.

Food:

Termites and insects.

Conservation and Management of Reptiles and Amphibians

Reptile and amphibian conservation can be extremely effective when science is used to implement statutory protection, habitat protection and management, population monitoring, and in some cases, manipulation of habitats or individuals. Habitat alteration is the single most threat to both reptiles and amphibians worldwide. Therefore, protecting and connecting remaining natural habitats are essential to maintain healthy reptile and amphibian communities, as is restoration of degraded environments. Habitat management and restoration actions include traditional approaches that are effective locally. Although reptiles and amphibians are in decline worldwide, there is increasing public interest in these animals, which can provide the momentum necessary for effective protection, management and conservation in changing environments.

People residing adjacent to protected lands should be incorporated into long term habitat protection efforts to help garner local stakeholders support for protection. Engaging local communities in habitat protection is particularly effective in bio diverse regions because of the economic incentives provided by eco-tourism.

Preserving the reptiles and amphibians of the Ousteri Lake should be treated as a critical conservation goal. Habitat loss, illegal fishing activity, real estate business adjacent to the lake, dumping of industrial solid and liquid waste, illegal encroachment of agriculture and poaching are the biggest threats to the survival of reptiles and amphibians of the Ousteri Lake area. Hence, there is an urgent need to protect, conserve and create awareness among local people about the ecological role of reptiles and amphibians in wetland ecosystems like Ousteri Lake.

References

1. Alexandar, R. (2010). Conservation of Ousteri Lake, Puducherry. *Current Science*, vol. 98, no. 4, 25 pp.
2. AmphibiaWeb (2005). *Hoplobatrachus crassus*: Jerdon's Bullfrog. <http://amphibiaweb.org/species/4711>. University of California, Berkeley, CA, USA. Accessed 1 October 2020.
3. AmphibiaWeb (2020). <https://amphibiaweb.org>. University of California, Berkeley, CA, USA. Accessed 1 October 2020.
4. AmphibiaWeb (2008). *Polypedates maculatus*: Chunam Tree Frog. <http://amphibiaweb.org/species/4482>. University of California, Berkeley, CA, USA. Accessed 1 October 2020.
5. AmphibiaWeb (2009). *Kaloula pulchra*: Asian Painted Frog. University of California, Berkeley, CA, USA. <http://amphibiaweb.org/species/2157>. Accessed 1 October 2020.
6. Azeez, P.A. and Prusty, B.A.K. (2008) Transition metals in decomposing macrophytes in a wetland system. *Asian J. Water, Environ. Pollut.*, 5(1), 27-35 pp.
7. Azeez, P.A., Nadarajan, N.R. and Prusty, B.A.K. (2007) Macrophyte decomposition and changes in water quality. In: Singh, K.K., Juwarkar, A. and Singh, A.K. (eds.), *Environmental degradation and protection*, pp. 115-156. MD Publications, New Delhi.
8. BirdLife International (2004) State of the world's birds 2004: indicators for our changing world. Cambridge, UK. BirdLife International.
9. CMAP (Comprehensive Management Action Plan for Conservation). (2011). Comprehensive Management Action Plan for Conservation of Oussudu Sanctuary, Puducherry submitted by Sálím Ali Centre for Ornithology and Natural History (SACON), Moongilpallam, Anaikatti (PO), Coimbatore – 641 108, Tamil Nadu 2011.
10. Crump, L.M. (2010). Amphibian diversity and life history; p.1-19 In C. Kenneth Dodd Jr. (ed.). *Amphibian Ecology and Conservation A handbook of techniques*. Oxford: Oxford University Press.
11. Daniel, J. Hocking and Kimberly, J. Babbitt. (2014) Amphibian Contributions to Ecosystem Services. *Herpetological Conservation and Biology* 9(1):1-17 pp.
12. Daniel J.C. (1992). *The book of Indian Reptiles*, Bombay Natural History Society, Bombay. 136 pp.
13. Das, I. (2003). Growth of knowledge on the reptiles of India, with an introduction to systematics, taxonomy and nomenclature. *J. Bombay Nat. Hist. Soc.* 100 (2 & 3): 446-501 pp.
14. Emerson, S. (1976). "Burrowing in frogs." *Journal of Morphology*, 149(4): 437-458 pp.
15. IUCN (2012). IUCN Red List of Threatened Species (ver. 2012.1). <http://www.iucnredlist.org>. Accessed 1 October 2020.
16. Khan, M.S. (1996). "The oropharngeal morphology and feeding habits of tadpole of Tiger Frog *Rana tigerina* Daudin." *Russian Journal of Herpetology*, 2, 163-171 pp.

17. Khan, M.S. (2000). *Duttaphrynus melanostictu*. <https://amphibiaweb.org>. University of California, Berkeley, CA, USA. Accessed 1 October 2020.
18. Khandekar, A., Roy, P. and Kunte, K. (eds.) 2020. *Reptiles of India*, v. 1.25. Indian Foundation for Butterflies. <https://www.indianreptiles.org/>. Accessed October 1, 2020.
19. Murphy, J. C. (2007) : *Homalopsid Snakes, Evolution in the Mud*. Krieger Publishing Company.
20. Purkayastha, J. *Duttaphrynus stomaticus* (Lütken, 1864) . [online] India Biodiversity Portal, Species Page : Available at: <https://indiabiodiversity.org/biodiv/species/show/227038>. Accessed 1 October 2020.
21. Trishala, K. Parmar, Deepak Rawtani & Agrawal, Y.K. (2016). Bio indicators: the natural indicator of environmental pollution, *Frontiers in Life Science*, 9:2, 110-118 pp.
22. Uetz, P. (editor). The Reptile Database. <http://www.reptile-database.org>. Accessed October 1, 2020.
23. Vattakaven, T., George, R., Balasubramanian, D., Réjou-Méchain, M., Muthusankar, G., Ramesh, B., Prabhakar, R. (2016). India Biodiversity Portal: An integrated, interactive and participatory biodiversity informatics platform. *Biodiversity Data Journal* 4: e10279. <https://doi.org/10.3897/BDJ.4.e10279>.
24. Whitaker, R. and Captain, A. (2004). *Snakes of India-the field guide*, Draco Books, Chennai. 479 pp.



Author's Short Biography



Alexandar. R is an independent researcher and environment educationist with broad area in ecology & environmental science. He received his doctoral degree (PhD) in Ecology and Environmental Sciences from Pondicherry University, Puducherry, India. He pursued his PhD on environmental education for Sustainable Development with prestigious NCERT -Doctoral fellowship. He has been awarded ICSSR-Post doctoral fellowship for working on climate change and freshwater resources and its associated biodiversity. He has qualified in UGC-NET in Environmental Science and TNSET in Life sciences. He has published several peer reviewed papers, scientific letters, book chapters and books. He is an avid bird watcher and photographer. You can reach him through email (enviroalexandar@gmail.com).



Ravichandra Mondreti is an independent researcher with broad research interests in Conservation Biology, Marine Ecology and Ornithology. He received his doctoral degree (PhD) in Ecology and Environmental Sciences from Pondicherry University, Puducherry, India. He pursued his PhD on the Ecology of seabirds in Bay of Bengal and Lakshadweep with a special conservation focus on the Sooty Tern of Pitti Island, Lakshadweep, India. During his PhD, he received a MAHEVA (Man Health Environment biodiversity in Asia) Fellowship from Montpellier University, France under the ERASMUS MUNDUS Action 2 programme of the European Union. He published several peer reviewed papers and books. His research is regularly covered in various media outlets. He is an avid bird watcher and photographer. You can reach him through email (ravichandra.mondreti@gmail.com) or twitter ([@ravl2319](https://twitter.com/ravl2319)).



Mr. Rahul Gour is a postgraduate student studying ecology at the Department of Ecology and Environmental Sciences, Pondicherry University. He belongs to the forum of those fortunate individuals who studied and worked as an Engineer for quite a few years before making a shift towards the field of wildlife sciences. Continually curious and ready to explore the wonders of life and the natural world, trying to learn about animals' function in their habitat and interact with other biotas of life. The content of this material is a short and quick attempt of our exploration to find the elusive life of anurans and reptiles that exist in and around Ousteri lake, and indeed there will be more to explore in future.

**ENVIS SCHEME Sponsored by
Ministry of Environment, Forest & Climate Change
Government of India
New Delhi**

Puducherry ENVIS Hub

**Puducherry Pollution Control Committee
3rd Floor, PHB Building
Anna Nagar
Puducherry - 605005.**



Contact Us :

✉ envis.pon@nic.in

☎ 0413 - 2201256

🌐 <https://dste.py.gov.in/Envispdy/>



978-81-954242-5-2