

ZOO'S PRINT

Communicating science for conservation



Magazine of Zoo Outreach Organisation
www.zoosprint.org

ISSN 0971-6378 (Print); 0973-2543 (Online)
Vol. XL, No. 8, August 2025

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Fading Fins, Flowing Hopes: A Perception Study on Denison's Barb and its Riverine System - Part 2

After completing our initial perception studies along the Iruvazhanjippuzha River, we planned to explore another important river in Kerala- the Payaswini River, also known as the Chandragiri River. This river originates in the Talakaveri Wildlife Sanctuary in Karnataka's Western Ghats and flows through towns such as Adyadka, Sullia, Adoor, Muliya, Chengala, Kasaragod, and finally joins the Arabian Sea. It is the longest river in the Kasaragod District of Kerala.

We began our journey on 19 May 2025 and reached Kasaragod, choosing to stay in Adoor, which was centrally located for our fieldwork. Since the river flows through both Karnataka and Kerala, we planned to spend three days in each state. Language barriers were a challenge, but manageable – Koshik spoke Tulu and Kannada, useful in Sullia and nearby villages of Karnataka while Sidharthan, being a Malayali, handled communication in Kerala. This division helped us collect meaningful data from locals during our perception study.

In the Sullia region, local communities confirmed the presence of *Sahyadria denisonii*—commonly known as “Miss Kerala”—and noted that the fish had historically been targeted for trade.

Zooreach activities

Previously, this was a part-time occupation for many residents, and during the fishing ban in Kerala, teams from the state would visit Sullia to collect the fish for trade. Interestingly, many locals involved in earlier fishing activities were misled by middlemen who claimed the fish were exported for medicinal purposes to avoid disclosing trade specifics. While the trade has declined, fishing still occurs during the summer when water levels are low. Unfortunately, this seasonal reduction in water levels leads to water scarcity for domestic and agricultural use. Few claim unregulated water extraction using electric pumps run continuously due to free electricity schemes leads to water scarcity.

Locals also expressed concern about declining fish populations and attributed this to overfishing, water extraction, and

environmental disturbances like the 2018 Madikeri landslide, which they believe altered the river's ecology. The use of JCBs to clear riverbeds and create deep pools was also reported, alongside small-scale sand mining.

Most of the fishermen typically use nets and, occasionally, illegal methods like dynamite fishing. They suggest that the Denison Barb is found in both shallow and deep waters, with larger individuals preferring deep pools during the monsoon. Specific nets are used to minimise damage to the fish, as even minor injuries reduce their market value. People who used to transporting these fish said that transportation of these fish is risky, with slight changes in temperature



or water quality often resulting in mass deaths. The high mortality, combined with falling prices and the costs of hiring labourers (Rs. 200–300 per person daily plus meals), has made the trade increasingly unviable. Earlier the fish longer than 2 inches fetched Rs. 40–50, while smaller ones sold for Rs. 25. These prices have since plummeted, further discouraging traders.

On the third day of our visit, we happened to meet a local dealer involved in the trade of these fish. He shared valuable insights from a trader's perspective. According to him, the fish can be found from Koyanadu near Sampaje in Madikeri taluk to Aloor in Kasaragod taluk. He observed that during the monsoon, the fish are found in deep pools over 3 m deep, while in summer, they move closer to the riverbanks due to reduced water levels. These fish do not require a specific habitat and are found throughout the river. He mentioned that traders usually use a special type of net in slow-flowing or stagnant water to catch the fish alive.

However, in Kallugundi, harmful practices like using poison and dynamite are also used to catch them for consumption, which causes diseases among the fish.



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The species reportedly breeds twice a year—June and December—during which he avoids fishing. He also pointed out several major threats to the fish and the river ecosystem, backed by photos and videos. The most serious issues include: the release of untreated effluents from the Centrifuge Latex Factory and the Crepe Rubber Factory of the Karnataka Forest Development Corporation, which led to a mass fish death just three months ago; direct discharge of wastewater from engineering and medical institutions; harmful chemicals from plantations and farms; over-extraction of water using electric pumps that run continuously due to free electricity, leading to dry riverbeds in summer; and illegal sand mining in some areas. He emphasized that pollution is the biggest threat to the fish and river, and instead of enforcing a complete ban, sustainable fishing should be promoted by educating the local community.

On the 4th day, we began our perception studies from Aloor Village of Kerala, where the Payaswini and Kudumbur rivers converge near the Aloor Dam. Local fishermen confirmed that *Sahyadria denisonii* is absent here, likely due to increased salinity from seawater intrusion. Additionally, one local suggests that some fishermen have installed nets near the One elderly resident recalled that the

estuary, blocking upstream fish migration, which is a recent and troubling practice. Few locals also noted an increase in otter and cormorant populations, which they believe contribute to fish depletion.



river never dried up in summers in the past; its current seasonal desiccation has intensified overfishing. Others pointed to increased riverbank erosion after dam construction, widening the river and altering its flow. A few locals have also informed us about the conservation of Palappuvan/Bhimanama in the Payaswini River. Palappuvan/Bhimanama is the name given by the locals for the Asian Giant Softshell Turtle, which is the largest freshwater turtle in the world. This turtle is 'Critically Endangered' and listed under Schedule I of the Indian Wildlife Protection Act, 1972. We were happy to know that the conservation of this crucial species and their nesting habitat is ongoing with the involvement of the locals along the river stretch. This conservation effort indirectly helps many other species' conservation in the river.

In our view, the Sullia region poses a more serious threat to the Miss Kerala fish due to intense overfishing, pollution, and small-scale sand mining. While the river's stretch through forested areas remains relatively safe and protected, conservation challenges persist in more populated regions.



Encouragingly, many local communities show a positive attitude toward protecting the river, recognising their dependence on it for water. However, with proper awareness and collaborative efforts, a more ecologically sustainable riverine system can be achieved. It's important to note that these insights are based on preliminary observations from a single study area and have not yet been thematically analysed in depth. Although the hope of conservation being a success will depend on the combined efforts of local communities, government agencies, NGOs, and all stakeholders working together for the protection of the river and its unique biodiversity.



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Citation: Rao, K.V. & Sidharthan (2025). Fading Fins, Flowing Hopes: A Perception Study on Denison's Barb and its Riverine System – Part 2. In: Zoo's Print 40(8): 01–05.

Bull sharks in the Vashishti River, western India: insights from social media



Bull sharks *Carcharhinus leucas* in Vashishti River gillnet (Screenshots from original footage.). © P. Koli.

Bull sharks, *Carcharhinus leucas* (Valenciennes, 1839), are euryhaline elasmobranchs capable of occupying both marine and freshwater environments (Gausmann 2021). As apex predators, they play a crucial role in maintaining trophic cascades, particularly in riverine and estuarine habitats that also serve as their nurseries (Dwyer et al. 2020). Despite their ecological significance, very little has been learnt about their biology and movements, especially in freshwater areas.

Social media platforms have emerged as a useful tool for ecological monitoring, enabling widespread data collection and real-time tracking of species distributions (Ghermandi & Sinclair 2019). Passive citizen science—where

impromptu ecological observations are shared publicly outside formal campaigns—has proven valuable for documenting wildlife occurrences (Edwards et al. 2021). Examples span from crowd-sourced bird sightings (Davis et al. 2017) to social media records of Clown Wedgefish *Rhynchobatus cooki* distribution (McDavitt & Kyne 2020). This study uses passive citizen science data from Instagram, a social networking service, to provide evidence of bull shark utilization of the Vashishti River, Maharashtra, demonstrating the value of social media data for ecological monitoring.

In April 2023, a 90-second Instagram video (posted by @prajyot_koli_0011) emerged, showing three bull sharks captured in a gillnet

in the Vashishti River, Maharashtra. The footage depicts a local fisher retrieving the net containing three sharks estimated at 1.2–1.5 m in total length. Identification as *C. leucas* was made based on multiple morphological characteristics visible in the video: a short, rounded snout; proportionally smaller second dorsal fin; distinct crescent-shaped precaudal pit; anal fin lacking a prominent notch; and the characteristic, black-tipped fins with dark upper caudal margins (Compagno & Niem 1998). Both the video and its accompanying caption identify the location as the Vashishti River. Screenshots of key identification frames are provided as supporting information.

The Vashishti River, which originates in the Western Ghats and discharges into the Arabian Sea along Maharashtra's Konkan coast (Nasnodkar & Nayak 2018), has now been confirmed through this video evidence to function as a habitat for bull sharks. However, the precise capture location within the river system remains uncertain due to the absence of distinguishable geographic markers in the footage and potential tidal influences on shark movement patterns.

The incidental discovery of bull sharks in the Vashishti River via Instagram underscores the growing importance of social media platforms in modern ecological monitoring. While such opportunistic data has inherent limitations including potential geolocation inaccuracies and identification uncertainties, this study demonstrates how citizen-contributed observations can reveal previously undocumented species distributions. These

findings warrant further investigation into the bull sharks' seasonal movements, habitat preferences, and potential nursing areas within the Vashishti River system. Future studies should prioritize collaboration with local fishing communities to assess population status and identify conservation threats, particularly from bycatch in gillnet fisheries, as evidenced in the video documentation.

Acknowledgement

The screenshots analyzed in this study were derived from publicly available Instagram content posted by Shri Prajyot Niwate (@prajyot_koli_0011). Their use falls under fair dealing provisions for non-commercial scientific research under relevant copyright law. The author acknowledges Shri Niwate's original documentation of this ecological event and affirms that no commercial use has been made of this material.

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Citation: Chakraborty, P. (2025). Bull sharks in the Vashishti River, western India: insights from social media. MIN #139, In: *Zoo's Print* 40(8): 06–08.

New locality record for Southern Blackbuck (Mammalia: Artiodactyla: Bovidae) in Tamil Nadu, India

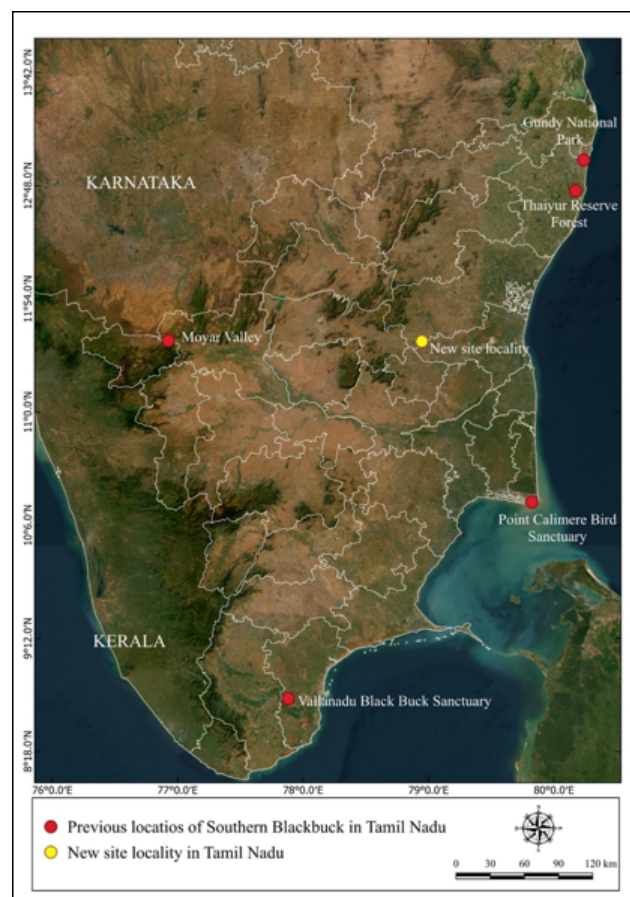
The Blackbuck (*Antelope cervicapra*), a graceful, medium-sized antelope, is native to India's open landscapes. It thrives in grasslands, dry thorn scrub, sparsely wooded forests, and agricultural fringes across several Indian states - including Andhra Pradesh, Bihar, Chhattisgarh, Goa, Gujarat, Haryana, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, and West Bengal (Castello 2016).

However, increasing human activity and land-use changes such as reforestation, expansion of irrigated agriculture, and urban sprawl have severely impacted its habitat, contributing to a notable decline in population (Daniel & Arivazhagan 2008; Mahato et al. 2010). As a result, the species is protected under Schedule I of the Indian Wildlife (Protection) Act, 1972, which affords it the highest level of legal protection. Additionally, it is listed in Appendix III of the Convention on International Trade in Endangered Species (CITES) to curb illegal international trade.

Taxonomically, the genus *Antelope* has been classified into four geographically distinct subspecies: *Antelope cervicapra cervicapra* in Northern India, *Antelope cervicapra centralis* in Central India, *Antelope cervicapra rajputanae* in Western India and *Antelope cervicapra rupicapra* in Southern India (Vinay Kumar & Kumara 2022). The southern blackbuck (*A. c. rupicapra*) is predominantly found in Andhra Pradesh, Telangana, Karnataka, and Tamil Nadu. Notable populations exist in protected areas such as the Vallanadu Black Buck Sanctuary (Prashanth et al. 2016), Point Calimere Wildlife and Bird Sanctuary (Arandhara et al. 2020; Baskaran et al. 2016), and Guindy National Park (Sankar Raman et al. 1995). They are also recorded in the Moyar Valley

(Rathore 2017) and in smaller numbers within the Thaiyur Reserved Forest, part of the Chengalpattu Forest Division (Narasimmarajan & Thomas 2014).

We report a new site record of Blackbuck (*Antelope cervicapra*) from the Krishnapuram Reserved Forest (11.563224, 78.946958), located within the Villupuram Forest Division, Tamil Nadu. This marks a new site record for the species in this region. On 26 January 2023, at approximately 1640 h a herd of seven Blackbuck was observed, comprising one adult male and six adult females. The area is characterized by southern dry mixed thorn scrub forest, interspersed with plantation patches. A brief conversation with a local herder revealed





New site locality (Krishnapuram Reserved Forest, Villupuram Forest Division) and the previously known locations of Southern Blackbuck distribution in Tamil Nadu, India. A herd of Southern Blackbuck sighted in Krishnapuram Reserved Forest. © Aravind Aathi.

that poaching continues to pose a major threat to this population. Additionally, the presence of grazing livestock may not only lead to competition for food resources but also pose a risk of disease transmission to the Blackbuck.

Further ecological assessments and long-term monitoring are essential to understand the population dynamics here. Such efforts would be instrumental in framing targeted conservation strategies to safeguard this remaining population of southern Blackbuck in the Krishnapuram Reserved Forest.

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Citation: Kothandapani, R., S. Vimalraj, B.M. Krishnakumar, P. N. Ponmudi, L. Maniezhilan & A. Athi (2025). New locality record for Southern Blackbuck (Mammalia: Artiodactyla: Bovidae) in Tamil Nadu, India *Mammal Tales* #126, In: *Zoo's Print* 40(8): 09–10.

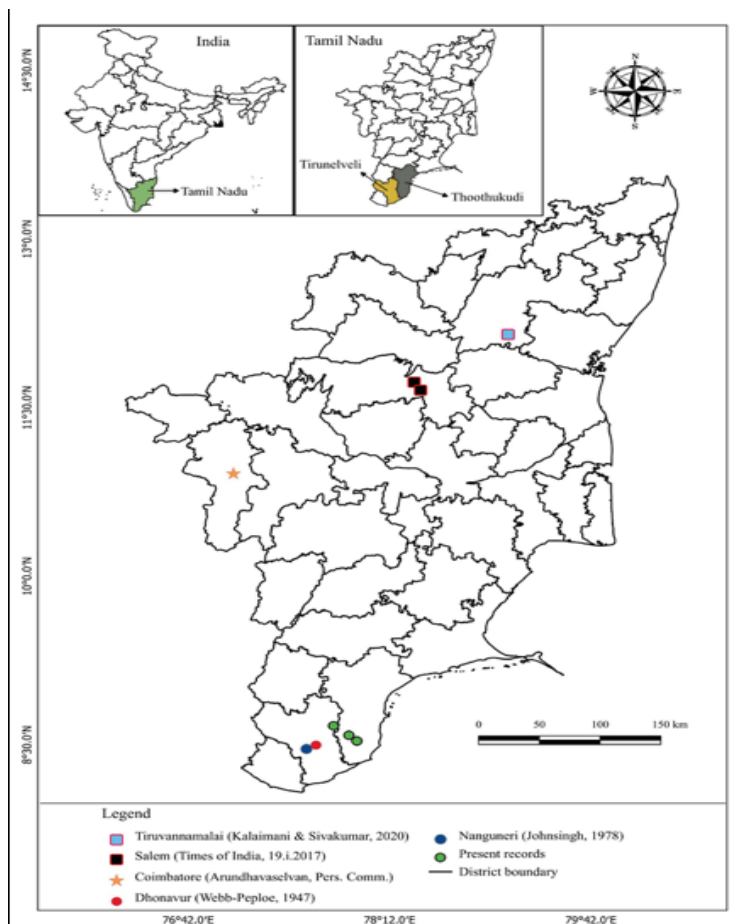
Range reaffirmation: Indian Fox sighting in eastern Tamil Nadu after four decades

The Indian Fox (*Vulpes bengalensis*) is distributed along the plains of the Indian subcontinent (Garg et al. 2023). Their habitats are characterized by open landscapes in semi-arid zone with flat to undulating terrain covered by grasslands or scrub cover (Gompper & Vanak 2006).

The environment with relatively dry weather, low vegetation cover provides suitable conditions for their hunting and denning (Jhala 2016). The species also known to inhabit thorny deciduous forests and marginal croplands and can tolerate human presence (Punjabi et al. 2013).

On the other hand, it avoids the true deserts and the steep terrain with dense-wooded forests or tall grasslands (Gompper & Vanak 2006). Historical accounts and recent surveys confirm their absences along the forests of Western Ghats and coastal habitats in further west. It plays a vital ecological role as a mesopredator, regulating populations of rodents, insects, and other small vertebrates, and aiding seed dispersal, thus maintaining grassland ecosystem balance and

health (Vanak & Gompper 2010; Jhala 2016). Its presence indicates healthy, functioning semi-arid and grassland habitats in peninsular India.



Spatial representation of former and current sightings of Indian Fox in Tamil Nadu

Date	Location & Coordinates	Event/Observation	Remarks
31.iii.2014	Pidaneri village, Thoothukudi. 8.534622N, 77.956964E.	The forest department rescued the Indian Fox, and the late Naveen Joseph shared this information with us.	First confirmed occurrence of the species in Thoothukudi district
08.viii.2020	Krishnapuram, Sivanthipatti region, Tirunelveli. 8.681458N, 77.78492E.	Indian Fox observed near abandoned stone quarry.	They were frequently sighted near quarries, pond banks, and knoll during twilight.
05.x.2020	Kettiyampalpuram, Thoothukudi. 8.585606N. 77.89725E.	The forest department rescued the Indian fox after it fell into a well.	Second confirmed occurrence of the species in Thoothukudi district.

In Tamil Nadu, confirmed reports of *Vulpes bengalensis* are limited. Arundhavelvan (pers. comm.) documented its presence approximately forty years ago in Chettipalayam, within the Coimbatore district. More recently, Kalaimani and Sivakumar (2020) reported the observation of a female with two pups at Adiannamalai lake, Tiruvannamalai district. Historically, Webb-Peploe (1947) recorded sightings from Dhonavur village, located 3 km east of the Kalakkad-Mundanthurai Tiger Reserve in the southern Western Ghats.

Additionally, Johnsingh (1978) investigated certain aspects of the ecology and behavior of *V. bengalensis* in Nanguneri Taluk, Tirunelveli district, forty years ago. Since then, no further verified sightings have been documented in

Tirunelveli. Herein, we report recent sightings of *Vulpes bengalensis* from Tirunelveli and Thoothukudi districts in eastern Tamil Nadu, thereby reaffirming the species' presence in this region after four decades.

Recent sightings and rescue location of the Indian Fox (*Vulpes bengalensis*) documented in Thoothukudi and Tirunelveli districts, southern Tamil Nadu, between 2014 and 2020.

The Tirunelveli and Thoothukudi districts are situated in south and southeastern Tamil Nadu, respectively. Both areas are characterized by vast expanses of scrublands, grasslands and croplands.



An Indian Fox (*Vulpes bengalensis*) standing near its den (above) and an individual fleeing upon detecting the observer (indicated by arrow) at Krishnapuram, Sivanthipatti region, Tirunelveli, southern Tamil Nadu. Both images are extracted from video footage. © M. Rameshwaran

The lowland areas receive the highest precipitation (548.7mm) during the Northeast monsoon (October to January). Indian Foxes are known to thrive in human-altered environments due to their adaptable behavior (Jhala 2016). This adaptability may explain their continued presence in the human-modified landscapes of Tirunelveli and Thoothukudi, where suitable lowland habitats have been increasingly converted for development.

Conservation threats

Extirpation of the Indian Fox has been linked to habitat degradation, disease, and anthropogenic pressures, including hunting for meat, fur, and skin (Garg et al. 2023). During a *Paraechinus nudiventris* survey in Nakkneri, we observed illegally displayed fox tails on door casings, reflecting superstitious beliefs and potentially increasing targeted hunting. Illegal hunting of Indian Hares (*Lepus nigricollis*) using dogs was also reported; as hares are a key prey for Indian Foxes (Home & Jhala 2009), their decline may further threaten fox populations. In addition, widespread changes in land use and land cover (LULC), including the conversion of grasslands and scrublands into monoculture plantations, urban infrastructure, and intensive agriculture, have led to a significant loss of suitable habitat for the species. Accidental mortality from open wells in agricultural lands remains a concern, underscoring the need for mitigation measures such as protective curbs. A continued decline in Indian fox populations could disrupt local ecological balance, potentially leading to increases in rodent populations and agricultural pest outbreaks. Urgent community awareness programs are recommended to dispel harmful myths and promote coexistence.

Acknowledgments

We thank Dr. Brawin Kumar for including us in the Hedgehog survey at Nakkneri, and the local shepherd for insights on the Indian Fox. The first author is grateful to the Thoothukudi forest division. We also acknowledge Mr. S. Balasubramanian for field assistance, and Mr. Arundhavaselvan and the late Mr. A. Naveen Joseph for sharing valuable information.

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Citation: Rameshwaran, M., B.M. Krishnakumar & M. Mithran (2025). Range reaffirmation: Indian Fox sighting in eastern Tamil Nadu after four decades, *Mammal Tales* #164, In: *Zoo's Print* 40(8): 11–13.

Preliminary Studies on the Diversity of Butterfly Species in Ponda Education Society's Ravi S. Naik College Campus, Goa, India

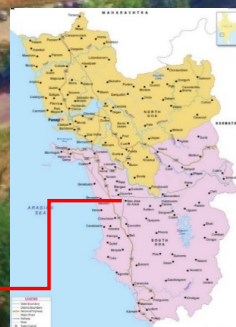
Butterflies are integral components of biodiversity and play crucial ecological roles in forest ecosystems. They have a symbiotic relationship with plant diversity (Singh 2011), and their presence in a habitat indicates the occurrence of particular plant and animal species (Gupta & Majumdar 2012). Butterflies are valuable ecological indicators (Kearney et al. 2010) and can reflect environmental factors such as physiological resilience, habitat territory, temperature, and light (Gaonkar 1996; Kunte 2000; Singh & Bhandari 2003). Additionally, butterflies act as predators (Sharma et al. 2020).

Their role in natural pest control and as prey for other wildlife directly ties their presence to the stability of local biodiversity (Gupta & Majumdar 2012; Swengel & Swengel 2013).

Given their ecological importance, studying butterflies in semi-protected environments, such as educational campuses, provides valuable insights into conservation potential and the health of local ecosystems. The P.E.S. College campus offers a relatively undisturbed landscape ideal for studying butterfly diversity. This study aims to investigate the diversity of butterfly species on the P.E.S. College campus.



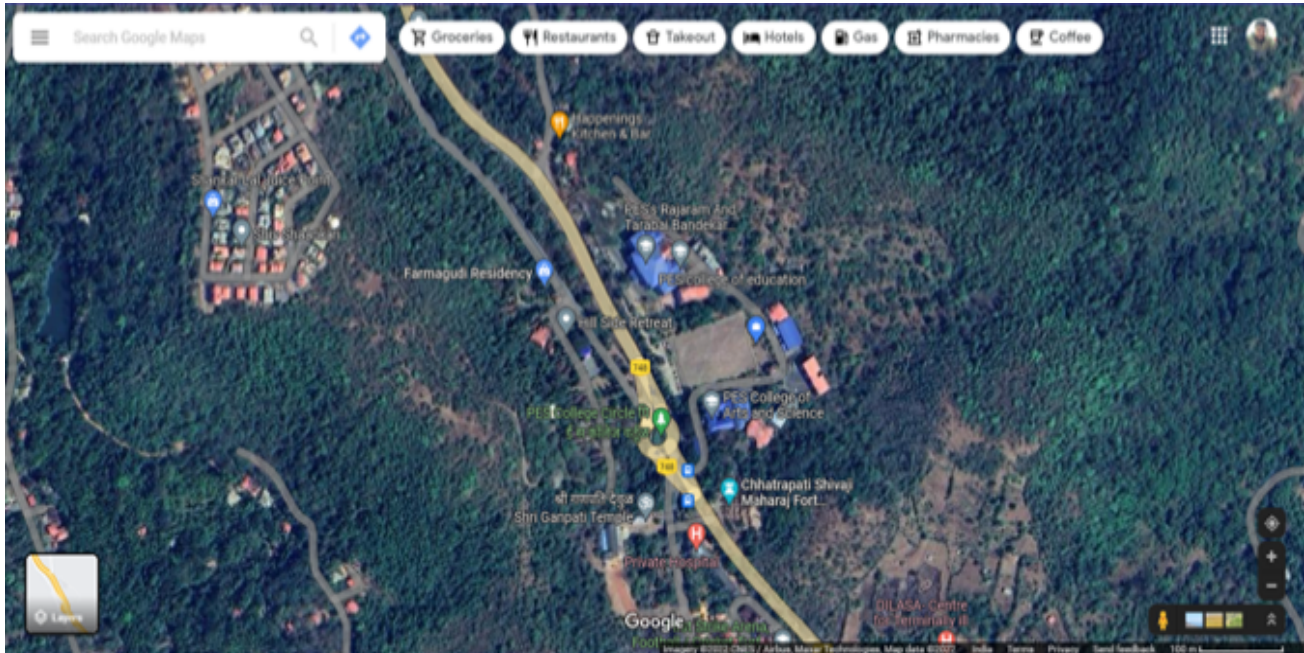
Aerial photograph of PES college campus



Map 1: Map of study area

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Satellite images of study area

Study area

The present study was conducted in P.E.S College campus situated at Farmagudi plateau lies between 15.413611° N, 73.989444° E with an area of 35000 km². Farmagudi plateau is home to various residential colonies, government buildings, and educational institutions. It is also a tourist destination, known for the famous Gopal Ganesh temple and the Shivaji fort.

The college campus is surrounded by moist deciduous vegetation mixed with evergreen species, scrub jungle, and lateritic vegetation. Sloping hills around the campus are used by locals for cultivating seasonal vegetables.

Significant cashew and banana plantations are also present around the campus, while small patches of Acacia plantations are found within the campus. The campus is surrounded by

grasslands, bushy forests, wild trees, flowering plants, shrubs, and other plantations.

Materials and methods

The butterfly study was conducted using the visual encounter method and transect method (Murugesan et al. 2013; Saha et al. 2015; Panda et al. 2016; Abdullahi et al. 2019; Kumar et al. 2019). During random walks and opportunistic sighting (Bowalkar et al. 2017) butterfly species were noted and later were included in the checklist. Visually encountered butterflies were identified on the field using photographic guides (Kunte & Gadgil 2000; Rangnekar 2007; Singh 2011; Kehimkar 2008). Online source <https://www.ifoundbutterflies.org> was also used to identify butterfly.

The pooled data of the each survey from the site were separately maintained. A preliminary

Checklist of butterfly species reported from study area

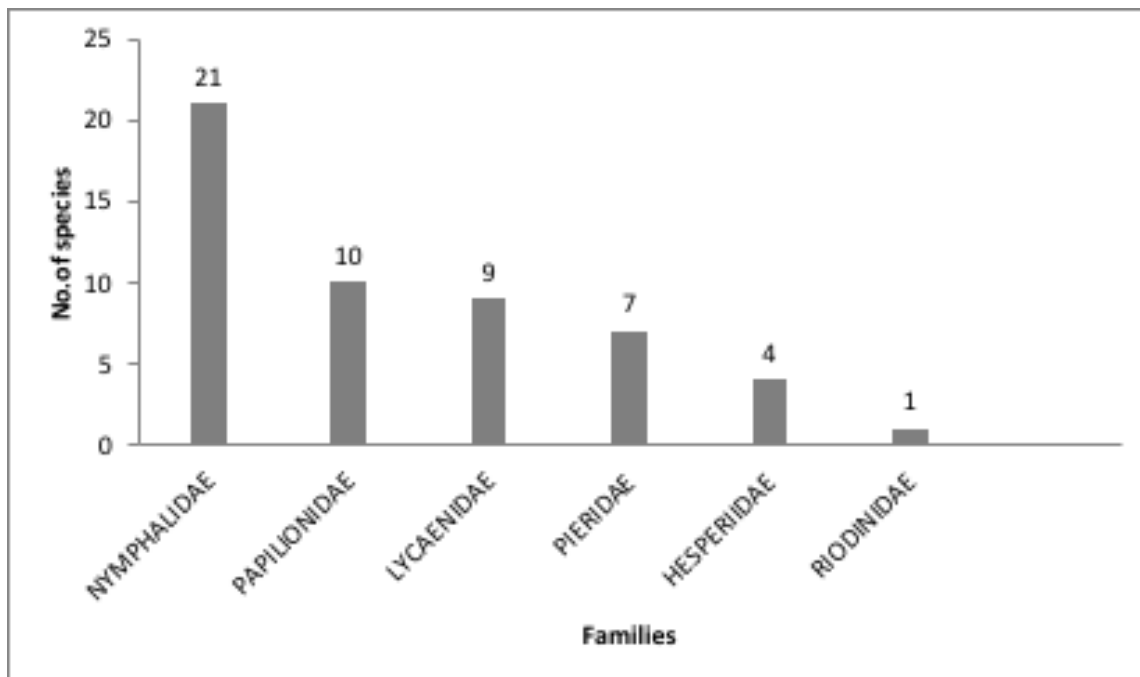
Sr. No.	Family / Species	Common Name	IUCN Red List	WLP Act. Scheduled	Endemic
Family: Nymphalidae					Southeast Asia, Indian Subcontinent
1	<i>Neptis hylas</i>	Common Sailor			
2	<i>Parantica aglea</i>	Glassy Tiger			
3	<i>Junonia almana</i>	Peacock Pansy	Least Concern		
4	<i>Junonia lemonias</i>	Lemon Pansy			
5	<i>Ypthima huebneri</i>	Common Four-ring			
6	<i>Hypolimnas misippus</i>	Danaid Eggfly		Schedule I	
7	<i>Orsotriaena medus</i>	Medus Brown			
8	<i>Danaus chrysippus</i>	Plain Tiger			
9	<i>Junonia iphita</i>	Chocolate Pansy			
10	<i>Euploea core</i>	Common Crow		Schedule IV	
11	<i>Junonia atlites</i>	Grey Pansy			
12	<i>Melanitis leda</i>	Common Evening Brown	Least Concern		
13	<i>Mycalesis perseus</i>	Common Bushbrown			
14	<i>Ypthima baldus</i>	Common Five-ring			
15	<i>Hypolimnas bolina</i>	Great Eggfly			
16	<i>Euthalia aconthea</i>	Common Baron			
17	<i>Acraea terpsicore</i>	Tawny Coster			
18	<i>Idea malabarica</i>	Malabar Tree- Nymph***	Near Threatened		
19	<i>Danaus genutia</i>	Striped Tiger			
20	<i>Kallima inachus</i>	Orange Oakleaf			
21	<i>Elymnias hypermnestra</i>	Common Palmfly			
Family: Papilionidae					
22	<i>Troides minos</i>	Southern Bird wing*	Least Concern	Schedule I	Sri Lanka, Western Ghats
23	<i>Pachliopta aristolochiae</i>	Common Rose	Least Concern		Sub continent of India, Sri Lanka
24	<i>Graphium agamemnon</i>	Tailed Jay			
25	<i>Graphium sarpedon</i>	Common Blue bottle	Least Concern		
26	<i>Papilio buddha</i>	Malabar Banded Peacock		Schedule II	Western Ghats
27	<i>Papilio polymnestor</i>	Blue Mormon**			Sri Lanka, Peninsular India
28	<i>Pachliopta hector</i>	Crimson Rose	Least Concern	Schedule I	
29	<i>Papilio clytia</i>	Common Mime	-	Schedule I	
30	<i>Graphium nomius</i>	Spot Swordtail	Least Concern	-	
31	<i>Papilio polytes</i>	Common Mormon			
Family: Pieridae					
32	<i>Delias eucharis</i>	Common Jezebel			
33	<i>Catopsilia pomona</i>	Lemon Emigrant			
34	<i>Eurema hecabe</i>	Common Grass Yellow			
35	<i>Leptosia nina</i>	Psyche			
36	<i>Cepora nerissa</i>	Common Gull		Schedule II	
37	<i>Catopsilia pyranthe</i>	Mottled Emigrant			

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Sr. No.	Family / Species	Common Name	IUCN Red List	WLP Act. Scheduled	Endemic
38	<i>Eurema brigitta</i>	Small Grass Yellow			
Family: Lycaenidae					
39	<i>Castalius rosiman</i>	Common Pierrot	-	Schedule I	
40	<i>Zinina otis</i>	Lesser Grass Blue	Least Concern	-	
41	<i>Lampides boeticus</i>	Pea Blue	Least Concern	Schedule II	
42	<i>Caleta caleta</i>	Angled Pierrot			
43	<i>Prosotas nora</i>	Common Lineblue			
44	<i>Rathinda amor</i>	Monkey Puzzle			
45	<i>Chilades pandava</i>	Plains Cupid			
46	<i>Loxura atymnus</i>	Yamfly			
47	<i>Euchrysops cnejus</i>	Gram Blue		Schedule II	
Family: Hesperidae					
48	<i>Oriens goloides</i>	Smaller Darlet			
49	<i>Spialia galba</i>	Asian Grizzled Skipper			
50	<i>Celaenorrhinus ambareesa</i>	Malabar Spotted Flat			
51	<i>Pseudocoladenia dan</i>	Fulvous Pied Flat			
Family: Riodinidae					
52	<i>Abisara bifasciata suffusa</i>	Suffused Double Banded Judy			

*-State butterfly of Maharashtra; **- State butterfly of Karnataka; ***- State butterfly of Goa



Graph showing dominant family in a study area.

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1. Common Sailor (*Neptis hylas*)



2. Glassy Tiger (*Parantica aglea*)



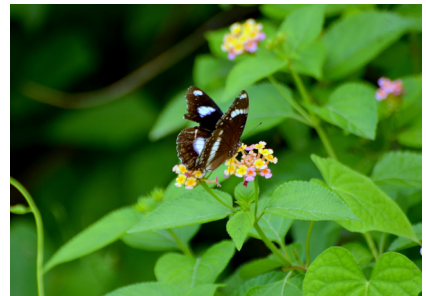
3. Peacock Pansy (*Junonia almana*)



4. Lemon Pansy (*Junonia lemonias*)



5. Common Four-ring (*Ypthima huebneri*)



6. Danaid Eggfly (*Hypolimnys misippus*)



7. Medus Brown (*Orsotriaena medus*)



8. Plain Tiger (*Danaus chrysippus*)



9. Chocolate Pansy (*Junonia iphita*)



10. Common Crow (*Euploea core*)



11. Grey Pansy (*Junonia atlites*)



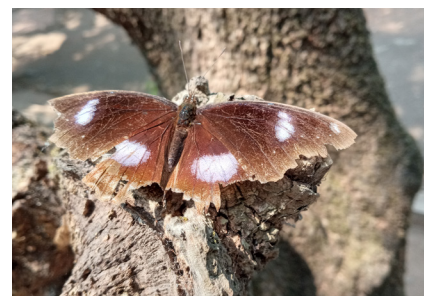
12. Common Evening Brown (*Melanitis leda*)



13. Common Bushbrown (*Mycalesis perseus*)



14. Common Five-ring (*Ypthima baldus*)



15. Great Eggfly (*Hypolimnys bolina*)

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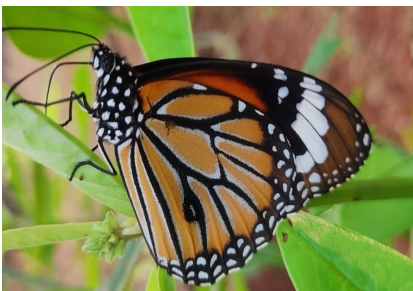
16. Common Baron (*Euthalia aconthea*)



17. Tawny Coster (*Acraea terpsicore*)



18. Malabar Tree Nymph (*Idea malabarica*)



19. Striped Tiger (*Danaus genutia*)



20. Orange Oakleaf (*Kallima inachus*)



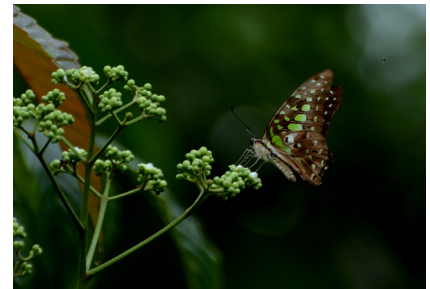
21. Common Palmfly (*Elymnias hypermnestra*)



22. Southern Bird Wing (*Troides minos*)



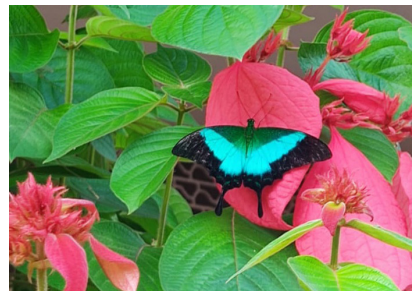
23. Common Rose (*Pachliopta aristolochiae*)



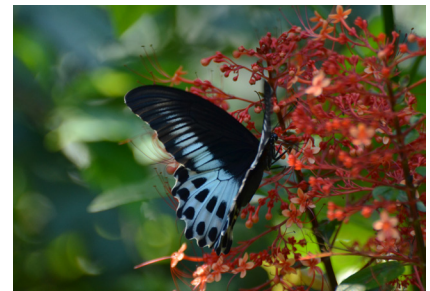
24. Tailed Jay (*Graphium agamemnon*)



25. Common Blue Bottle (*Graphium sarpedon*)



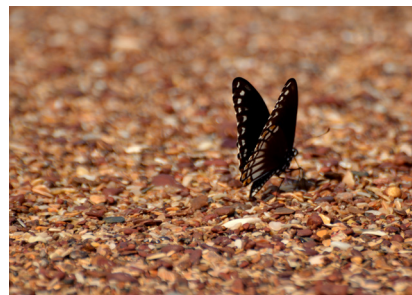
26. Malabar Banded Peacock (*Papilio buddha*)



27. Blue Mormon (*Papilio polymnestor*)



28. Crimson Rose (*Pachliopta hector*)



29. Common Mime (*Papilio clytia*)



30. Spot Swordtail (*Graphium nomius*)

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31. Common Mormon (*Papilio polytes*)



32. Common Jezebel (*Delias eucharis*)



33. Lemon Emigrant (*Catopsilia pomona*)



34. Common Grass Yellow (*Eurema hecabe*)



35. Psyche (*Leptosia nina*)



36. Common Gull (*Cepora nerissa*)



37. Mottled Emigrant (*Catopsilia pyranthe*)



38. Small Grass Yellow (*Eurema brigitta*)



39. Common Pierrot (*Castalius rosimon*)



40. Common Lesser Grass Blue (*Zinina otis*)



41. Pea Blue (*Lampides boeticus*)



42. Angled Pierrot (*Caleta caleta*)



43. Common Line Blue (*Prosotas nora*)



44. Monkey Puzzle (*Rathinda amor*)



45. Plains Cupid (*Chilades pandava*)

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46. Yam Fly (*Loxura atymnus*)



47. Gram Blue (*Euchrysops cnejus*)



48. Smaller Darlet (*Oriens goloides*)



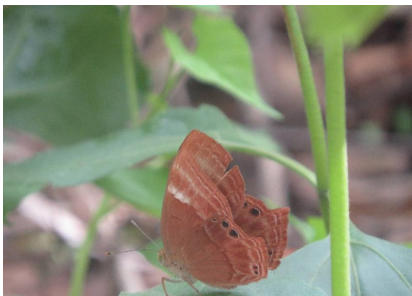
49. Asian Grizzled Skipper (*Spialia galba*)



50. Malabar Spotted Flat (*Celaenorrhinus ambareesa*)



51. Fulvous Pied Flat (*Pseudocoladenia dan*)



52. Suffused Double Banded Judy (*Abisara bifasciata suffusa*)

Photos: © Authors

checklist was prepared and used for further census work. The common name and scientific nomenclature of butterfly were adopted from Kunte (2000), Rangnekar (2007), and Singh (2011).

Results and discussion

A total of 52 butterfly species were documented, accounting for 20.47% of the total butterfly species known in Goa . The family Nymphalidae was the most dominant with 21 species followed by Papilionidae with 10 species, Lycaenidae with 9, Pieridae with 7, and Hesperidae with 4

species. The least represented was Riodinidae, with only one species.

The dominance of the Nymphalidae family aligns with previous studies (Kunte 1997; Kunte et al. 1999; Eswaran & Pramod 2005; Priya et al. 2008; Dolia et al. 2008; Krishnakumar et al. 2008; Gaude & Janarthanam 2015; Umapati et al. 2016; Bowalkar et al. 2017; Kumar et al. 2019; Koirala et al. 2020), being the largest butterfly family accounting for one third of known species world-wide (Kunte 1997; Chandekar & Nimbalkar 2015; Prajapati et al.



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2000; Kumar & Sharma 2013; Basavarajappa et al. 2018; Boruah et al. 2018; Koirala et al. 2020). Their dominance highlights the availability of larval host plants and adult nectar plants within the study area. Their ability to feed on various kinds of food could be the reasons for its dominance (Priya et al. 2008; Murugesan et al. 2013; Kumar et al. 2019; Koirala et al. 2020) also many species of this family are active fliers thus having ecological advantages to forage larger areas (Koirala et al. 2020). Plateaus in Goa are known for their rich floral diversity (Joshi & Janarthanam 2004) this is true for Farmagudi plateau also.

Several notable species, *Pachliopta hector* Crimson Rose, *Troides minos* Southern Bird Wing, *Castalius rosimon* Common Pierrot, *Papilio clytia* Common Mime, and *Hypolimnas misippus* Danaid Eggfly of schedule I, *Papilio buddha* Malabar Banded Peacock, *Euchrysops cnejus* Gram Blue, *Lampides boeticus* Pea Blue and *Cepora nerissa* Common Gull of schedule II and *Euploea core* Common Crow of schedule IV are protected under Indian Wildlife Protection Act, 1972.

Several endemic species, *Neptis hylas* Common Sailor endemic to Southeast Asia and Indian subcontinent, *Troides minos* (Southern Bird Wing) and *Papilio buddha* (Malabar Banded Peacock), endemic to the Western Ghats, *Pachliopta aristolochiae* Common Rose and *Papilio polymnestor* Blue Mormon are endemic to subcontinent of India and peninsular India was also reported from the study area indicating a rich habitat supporting unique

biodiversity. Other rare sightings, including species from the Lycaenidae and Hesperidae families, may reflect the scarcity of specific host plants or the difficulties of detecting smaller butterfly species in dense vegetation. The presence of Near Threatened species, such as *Idea malabarica* (Malabar Tree Nymph) recently declared as state butterfly of Goa, also highlights the conservation potential of this area.

The observed diversity can be attributed to a variety of host and nectar plants, such as *Hibiscus rosa-sinensis*, *Cassia fistula*, *Caesalpinia pulcherrima*, *Bauhinia racemosa*, *Tabernaemontana divaricata*, *Plumeria obtusa*, *Plumeria rubra*, *Vinca rosea*, *Gardenia jasminoides*, *Tridax procumbens*, *Mimosa pudica*, *Acalypha hispida*, *Ziziphus mauritiana* and *Bougainvillea spectabilis*, known for high nectar production and essential for butterfly existence (Lakshmi & Raju 2011). Additionally, the social forestry program along the nearby highway introduces native nectar plants, enriching the habitat further. The prevalence of high nectar-producing invasive species, like *Chromolaena odorata* and *Lantana camara*, has similarly contributed to the campus's capacity to support a wide range of butterfly species (Day et al. 2003).

The diversity and assemblage of butterflies on the P.E.S. College campus underscore the ecological value of maintaining natural vegetation and minimizing development. Butterflies serve as indicators of local biodiversity health, and their presence suggests a stable ecosystem capable of supporting a



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variety of species. The campus habitat benefits from a mix of native and exotic plants, which provide essential resources for butterfly survival. By integrating more native species and focusing on landscaping practices that attract butterflies, the campus could further enhance its ecological richness and support conservation efforts for threatened and endemic species.

Conclusion

The Presence of 52 butterfly species in and around the P.E.S. college campus reflects a healthy ecosystem patch. If the landscaping and maintenance of campus gardens and nearby natural vegetation if carefully planned, the diversity of butterflies may increase in the P.E.S. college campus providing a rich ground for butterfly conservation as well as for research (Saha et al. 2015) also it will help to conserve other insects, birds and small mammals. The wide assemblage of butterfly species in and around the PES college campus indicates rich floral diversity at the study area as butterflies are directly or indirectly depends on plants for their survival. Therefore, further research on the biodiversity of butterflies with special reference to their host plants and other factors (s) that contribute to their distribution, diversity and abundance may be investigated in future.

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Citation: Kiran, G., S. Naik, V. Parab, A. Prabhu (2025). Preliminary Studies on the Diversity of Butterfly Species in Ponda Education Society's Ravi S. Naik College Campus, Goa, India. *Bugs R All* #218, In: *Zoo's Print* 40(8): 14-24.

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Recurring observations of Red Junglefowl near the Solani River, Roorkee, Uttarakhand

The Red Junglefowl *Gallus gallus*, a wild ancestor of the domestic chicken, occurring widely across tropical Asia, has its domestication traced back approximately 8,000 years (Liu et al. 2006). It is ecologically significant by acting as a natural pest controller by consuming insects and aiding in seed dispersal (Arshad et al. 2000) and contributes to forest regeneration. As a crucial prey species, it supports the food web, providing sustenance for various predators. In India, it is common in the Gangetic plains, central regions, and Himalayan foothills, particularly within protected areas like Corbett and Rajaji national parks (Fernandes et al. 2009).

Although a few previous records exist from Roorkee on citizen-science platforms such as eBird (eBird 2025), these are sparse and lack detailed contextual information. Some of the sightings are mentioned as Exotic Escapees. A series of field observations in 2024 and 2025 suggests a consistent presence of the species near the Solani River in Haridwar District, Uttarakhand.

One adult male Red Junglefowl was sighted on 15 April 2025 at 0830 h near the confluence of the Solani River and the upper Ganga canal (approximately 29.88° N, 77.90° E). The temperature was recorded at around 25°C, and the humidity was 59–62%. The bird was observed foraging in a mixed plantation with sparse undergrowth for approximately 10 minutes, remaining undisturbed at a distance of 10–15 m. It was identified by its prominent red comb, wattles, grey legs, and long, metallic green tail feathers, consistent with field guides (Grimmett et al. 2011). The habitat consisted of Sal forest *Shorea robusta* and associated deciduous species, interspersed with agricultural fields and mango orchards. Urban habitation bordered the site between 200–400 m, but there was no human disturbance except for authors.

Additional observations of single individuals, primarily adult males, were recorded in different months during 2024 in similar habitats within the same general area. These repeated sightings suggest continued use of the



Red Junglefowl
Gallus gallus in
the open under-
storey in Roorkee,
Haridwar.
(© Shadab Ali)

site by the species and raise the possibility of a resident population. It also suggests the extant distribution of the species from the Shivalik region. The subtropical climate, availability of undergrowth, and riparian connectivity likely support its presence. The area is approximately 20–30 km² south-west of Rajaji National Park, suggesting potential habitat continuity in the broader Tarai-Shivalik region (Champion & Seth 1968).

The Red Junglefowl prefers forest edges, secondary scrub, and agricultural mosaics (Collias & Collias 1967; Johnsgard 1999). Its tolerance for modified landscapes has been reported from other parts of India (Sullivan 1991; Javed & Rahmani 2000; SoIB 2023). However, the proximity of rural poultry raises concerns about hybridization, which may threaten the genetic integrity of wild populations (Peterson & Brisbin 1998). Although classified as ‘Least Concern’ by the IUCN Red List (BirdLife International 2024), the species is protected under Schedule II of India’s Wildlife (Protection) Act, 1972 and is vulnerable to local threats such as habitat degradation and genetic introgression.

While existing eBird records confirm its presence in the area, this set of observations provides additional, site-specific data on habitat use and seasonality. These findings underscore the value of documenting occurrences in under-surveyed landscapes and can inform regional assessments of distribution and population status. Systematic surveys are recommended to confirm breeding activity and evaluate conservation concerns such as hybridization. Submitting photographic and temporal records to platforms like eBird would aid long-term monitoring and support science-based conservation planning.

Acknowledgements

The author acknowledges the value of open-access databases such as eBird and the State of India’s Birds report in verifying regional records.

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Citation: Mohammed, S.H & S. Ali (2025). Recurring observations of Red Junglefowl near the Solani River, Roorkee, Uttarakhand. Bird-o-soar #298, In: *Zoo’s Print* 40(8): 25–26.

A rapid avian checklist of Solur Village, Magadi Taluk, Ramanagara District, Karnataka, India

A rapid avian checklist of Solur, Magadi Taluk, Ramanagara District (now Bengaluru south), Karnataka (13.070° N, 77.244° E) is presented. Most of the landscape is characterized by a dry deciduous ecosystem, which receives ~1,546 mm of annual rainfall. This study is an opportunistic survey done from 13–15 July 2019, and birds were identified using the field guide (Grimmett et al. 2011). During the study, 21 species of birds belonging to seventeen families were recorded. The Solur Kere, which is

a large water body in the area, attracts aquatic birds like the Kingfisher, Purple Swamphen, and Little Grebe. The Cisticolidae family was found to be dominant with three species each, while families of Columbidae and Estrildidae have two species each; 14% of the birds are found to be aquatic birds, and 86% of the birds are found to be terrestrial birds; 43% of the recorded birds are insectivores, 29% are omnivores, 19% are granivores, and the rest, frugivores and piscivores, comprise 5% each.

Avifauna observed in the study site.

	Common name	Scientific name	Family	Order	Feeding guild	Habitat
1	Western Spotted Dove	<i>Spilopelia chinensis suratensis</i> (J.F. Gmelin, 1789)	Columbidae	Columbiformes	G	T
2	Laughing Dove	<i>Spilopelia senegalensis</i> (Linnaeus, 1766)				
3	Indian Roller	<i>Coracias benghalensis</i> (Linnaeus, 1758)	Coraciidae	Coraciiformes	I	A
4	Common Kingfisher	<i>Alcedo atthis</i> (Linnaeus, 1758)	Alcedinidae		P	
5	Indian Cuckoo	<i>Cuculus micropterus</i> Gould, 1837	Cuculidae	Cuculiformes	O	T
6	Grey headed Swamphen	<i>Porphyrio poliocephalus</i> (Latham, 1801)	Rallidae	Gruiformes		A
7	Ashy Prinia	<i>Prinia socialis</i> (Sykes, 1832)	Cisticolidae		I	T
8	Plain Prinia	<i>Prinia inornata</i> (Sykes, 1832)				
9	Common Tailorbird	<i>Orthotomus sutorius</i> (Pennant, 1769)				
10	Indian Jungle Crow	<i>Corvus culminatus</i> Sykes, 1832	Corvidae		O	T
11	Indian Silverbill	<i>Euodice malabarica</i> (Linnaeus, 1758)	Estrildidae		I	
12	Scaly-breasted Munia	<i>Lonchura punctulata</i> (Linnaeus, 1758)			G	
13	House Crow	<i>Corvus splendens</i> Vieillot, 1817	Corvidae		O	
14	Jungle Babbler	<i>Turdoides striata</i> (Dumont, 1823)	Leiotrichidae	Passeriformes		
15	White-browed Wagtail	<i>Motacilla maderaspatensis</i> J.F. Gmelin, 1789	Motacillidae		I	
16	Indian Robin	<i>Saxicoloides fulicatus</i> (Linnaeus, 1766)	Muscicapidae			
17	Purple Sunbird	<i>Cinnyris asiaticus</i> (Latham, 1790)	Nectariniidae		F	
18	House Sparrow	<i>Passer domesticus</i> (Linnaeus, 1758)	Passeridae			
19	White-browed Bulbul	<i>Pycnonotus luteolus</i> (Lesson, 1841)	Pycnonotidae		G	
20	Plum-headed Parakeet	<i>Psittacula cyanocephala</i> (Linnaeus, 1766)	Psittacidae		O	
21	Little Grebe	<i>Tachybaptus ruficollis</i> (Pallas, 1764)	Podicipedidae	Podicipediformes		A

G—Granivores | I—Insectivores | P—Piscivores | O—Omnivores | F—Frugivores | A—Aquatic | T—Terrestrial.



Spilopelia chinensis suratensis
(J.F.Gmelin, 1789)



Spilopelia senegalensis (Linnaeus, 1766)



Coracias benghalensis (Linnaeus, 1758)



Alcedo atthis (Linnaeus, 1758)



Cuculus micropterus Gould, 1837



Porphyrio poliocephalus (Latham, 1801)



Prinia socialis (Sykes, 1832)



Prinia inornata (Sykes, 1832)



Orthotomus sutorius (Pennant, 1769)



Corvus culminates (Sykes, 1832)



Euodice malabarica (Linnaeus, 1758)



Lonchura punctulata (Linnaeus, 1758)



Corvus splendens Vieillot, 1817



Turdoides striata (Dumont, 1823)



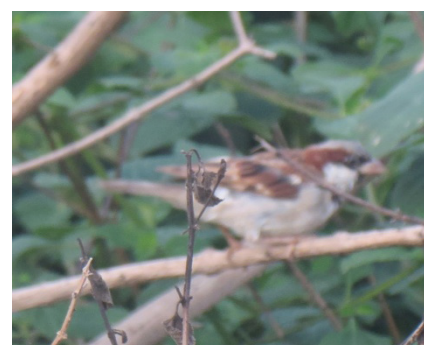
Motacilla maderaspatensis J.F.Gmelin, 1789



Saxicoloides fulicatus (Linnaeus, 1766)



Cinnnyris asiaticus (Latham, 1790)



Passer domesticus (Linnaeus, 1758)



Pycnonotus luteolus (Lesson, 1841)



Psittacula krameri (Linnaeus, 1766)



Tachybaptus ruficollis (Pallas, 1764)

These findings, similar to Phalke et al. (2016) and Harrington & Jayashankar (2023), in the Bengaluru region act as baseline data for future studies in and around Solur village.

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Citation: Mahendra, D., G. S. H. Deva & M. Jayashankar (2025). A rapid avian checklist of Solur, Magadi Taluk, Ramanagara District, Karnataka. *Bird-o-soar* #303, In: *Zoo's Print* 40(8): 27–29.

Moth watching at GITAM University Campus, Visakhapatnam

Moths are a crucial part of our ecosystem. They function as pollinators, help maintain ecological balance, serve as indicators of ecosystem health and provide evolutionary insights. Yet, moths are rarely appreciated. In order to better understand moths, national moth week, a global event, is organized annually in the month of July.



As part of the national moth week, we organized moth watching in the GITAM University campus at Visakhapatnam, Andhra Pradesh. The participants included the members of the nature club—Green Poets' Society.

We set up the white screen with LED lights to attract the moths. While we waited for the moths to get attracted to the lit screen, I briefed the participants about moths, their ecological importance and the prey-predator interactions between bats and moths.

After this, Dr. Harish Prakash organized a group game. The participants were divided into groups and were handed a printout containing movie posters related to moths. Each team had to pick a movie poster and come up with a movie plot based on the poster. The participants came up with unique, mind-blowing stories on moths.





Scorpion © Nikhil Biswas

When we went back to check the light screen, we did not find any moths. Rather, we found other insects such as rove beetles, winged ants, and forest cockroaches. We also examined the ground and trees nearby and found a scorpion, geckos, and mantis. Towards the end of the event, although we did not find any moths, we had a great time observing the nocturnal taxa around us. The moth watching event not only

ended up with participants appreciating moths, but all the tiny critters that live around us.

Acknowledgments:

I'm grateful to Dr. Harish Prakash for supporting me to lead the event. I'm also grateful to my fellow research scholars Yagnapathy Adari who helped me with purchasing the materials, and Abhisree M.K., who helped me with testing the initial setup. I would also like to thank the members of the Green Poets Society who helped with the planning of the event and whose participation made the event a success.

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Citation: Pinto, M (2025). Moth watching at GITAM University Campus, Visakhapatnam. In: Zoo's Print 40(8): 30–31.



Light trap setup © Melito Pinto

International Wildlife Conservation Day 2024: Workshop on conservation of wildlife with special reference to Indian Horseshoe Crabs, Chandbali Collage, Odisha

On the occasion of International Wildlife Conservation Day, observed on 4 December 2024, the Earth Crusaders Organisation (ECO), a regional conservation body based in Odisha, organized an event emphasizing the conservation of the ancient and ecologically significant Indian Horseshoe Crab *Tachypleus gigas* (Müller, 1785). The program was conducted in collaboration with Chandbali College, Bhadrak, and supported by the Centre for Research and Conservation of Indian Horseshoe Crabs (CRCIHSC), Fakir Mohan University (FMU), Bhubaneswar, and Anglia Ruskin University, Cambridge. The event included a two-day workshop titled "Conservation of wildlife with special reference to Indian Horseshoe Crabs."

Horseshoe Crabs, often referred to as "living fossils," have persisted for approximately 450 million years. These marine invertebrates are listed as Data Deficient under IUCN Red List, reflecting limited information on their population status and trends. The coastal regions of Bhadrak and Baleswar districts in Odisha serve as critical habitats for this species, making targeted conservation efforts in these areas imperative.

Workshop highlights and key discussions

The event brought together conservationists, researchers, policymakers, and students to address challenges in wildlife conservation with a focus on the Indian Horseshoe Crab. Distinguished experts delivered lectures and facilitated discussions on ecological, scientific, and conservation strategies.

Keynote address: Soubhagya Kumar Sahu, Divisional Forest Officer (DFO), Bhadrak, highlighted the region's rich wildlife resources and outlined the conservation strategies implemented in Odisha's wildlife sanctuaries, national parks, and zoos. He underscored the

ecological significance of the Indian Horseshoe Crab and the need for sustainable conservation measures.

In-situ and ex-situ conservation: Prof. Bisnu Prasad Dash, Adjunct Professor, PG Department of Zoology, FMU, elaborated on both in-situ and ex-situ conservation strategies for the Indian Horseshoe Crab. He emphasized habitat protection and controlled breeding programs as essential measures for sustaining the species.

Biotechnological and bioinformatic approaches: Dr. Bharat Bhusan Patnaik, Deputy Director, CRCIHSC, FMU, discussed the application of biotechnology and bioinformatics in wildlife conservation. He elaborated on their potential in identifying fitness traits and addressing knowledge gaps in the species' biology and ecology.

Research contributions: Researchers and academicians presented studies focusing on the conservation of wildlife resources. Key areas of research included:

- Monitoring avian migration patterns and their ecological significance.
- Utilizing advanced tracking tools to study habitat use, migration corridors, and behavioral ecology of wildlife species.
- Involving local communities and students from diverse disciplines in conservation initiatives.





Community engagement and traditional knowledge: The workshop emphasized the integration of local communities in conservation activities, recognizing their traditional ecological knowledge as a valuable resource. Collaborative efforts between scientists and communities were highlighted as critical for achieving conservation goals.

Panel discussions: The event featured panel discussions with experts who addressed topics such as habitat restoration, sustainable management practices, and community-driven conservation models. These discussions provided actionable recommendations for improving conservation practices for the Indian horseshoe crab.

Outcomes and recommendations: The workshop concluded with a consensus on the following key strategies: Strengthening both in-situ and ex-situ conservation programs for the Indian horseshoe crab. Enhancing research through the use of advanced biotechnological tools and bioinformatics to fill critical knowledge gaps. Employing tracking technologies to monitor species behaviour, habitat use, and migration

Field visit to Bhadrak to watch Horseshoe Crab.
Images © Shreya Pandey.



corridors and promoting youth engagement and multidisciplinary participation in conservation activities.

Conclusion: Aurobindo Samal, Founder and Chairman of ECO, emphasized the importance of youth sensitization toward conserving species of critical ecological and scientific importance. Workshops like these serve as platforms to raise awareness and inspire collective action for conservation, he remarked.

The event reinforced the urgent need for collaborative and innovative strategies to conserve the Indian Horseshoe Crab, a keystone species with profound ecological and scientific value. By integrating research, community participation, and advanced conservation technologies, the long-term survival of this ancient marine invertebrate can be ensured.



Participants of the workshop.

Acknowledgements

We are thankful to the Earth Crusaders Organisation for the logistical and financial support for the successful organisation of this event. We also like to thank Anglia Ruskin University and Fakirmohan University, Balasore for active collaboration.

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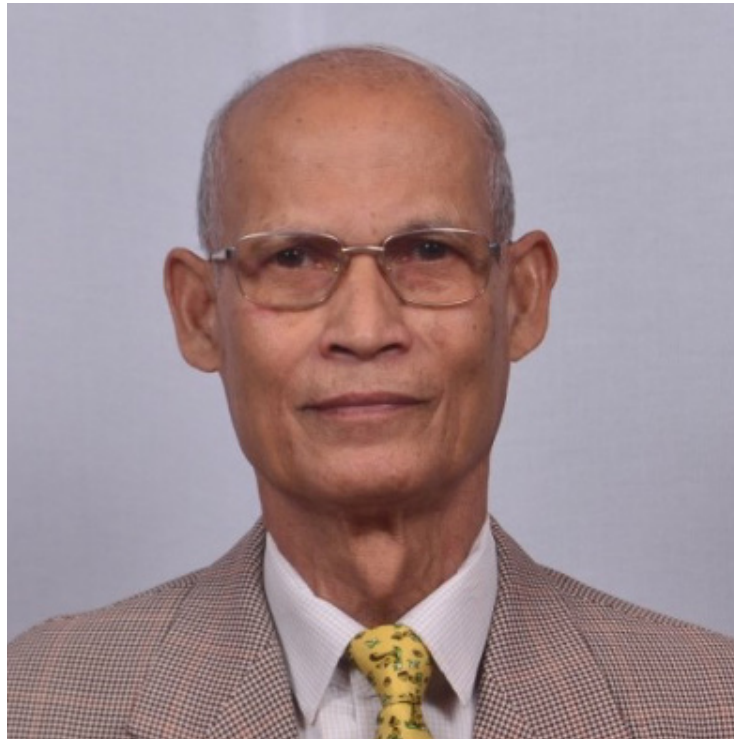
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Citation: Aurobindo, S. & S. Pandey (2025). International Wildlife Conservation Day 2024: Workshop on conservation of wildlife with special reference to Indian Horseshoe Crabs, Chandbali Collage, Odisha. In: Zoo's Print 40(8): 32–33.

Prof. Samiran Chakrabarti (1946–2025)



It is with profound sadness that we announce the passing of Professor Samiran Chakrabarti, an eminent entomologist, aphidologist, and acarologist of international repute, who passed away on 18th July 2025.

Prof. Chakrabarti was born on 5th January 1946, in Chittagong, Bengal Presidency (now in Bangladesh) achieved his B.Sc (Hons.) degree in 1966 and M. Sc. Degree in 1968 both in Zoology from the University of Calcutta, India. He performed his researches on aphids, a group of insects under the supervision of Prof. D. N. Raychaudhuri, a stalwart of entomology of that time and awarded Ph. D. in 1973. He joined the University of Kalyani as a faculty member and served the institution with remarkable dedication for over 38 years, inspiring generations of students and researchers. After his retirement in 2011, he was honoured with the prestigious UGC Emeritus Fellowship, a fitting tribute to his academic excellence.

The main topics of research of Prof. Chakrabarti were biosystematics of aphids of the Northwest and western Himalayas and mites, eriophyids or gall mites of northeast India. In addition, he studied aphid parasitoids and predators, oribatid mites, insects infesting sal plants, ecology of anophelene mosquitoes, mulberry whiteflies and its parasitoids, elaterid and scolytid beetles, biochemical changes in the aphid and eriophyoid galls and their impact on their biology and life cycles.

Prof. Chakrabarti was Principal Investigator of 16 major research projects funded by the UGC, CSIR, DST, INSA, ICAR, MoEFCC, India. Under his able mentorship, 34 students earned their Ph.D. degrees. He was a prolific author published 15 books, monographs and book chapters besides publishing 265 research papers. Prof. Chakrabarti discovered nearly 255 new species, erected 18 new genera, and recorded nearly 117 species new to India. He discovered 70 gall inducing aphids from the Himalayas for the first time and explored biology of a

few such species from Joshimath (Garhwal Himalayas) field station established by himself during 1981- 2007. His legacy is further immortalized through two aphid genera—Chakrabartiaphis and Chakrabartiella—named in his honor by scientists from France and the USA, along with numerous species bearing his name. Besides, 2 several new species were named after his name by scientists from India and abroad to honour his contribution in taxonomy.

Prof. Chakrabarti received many awards and recognitions from different organizations. Some of them were: S.P. Basu Medal (1975) from the Zoological Society, Kolkata; UNESCO Fellowship (1978–79) to work at the Czechoslovak Academy of Sciences; Visiting Young Scientist from Whilhem-Pieck Universitat Rostock (1979); Delegation of INSA(1981) for attending aphid symposium in Poland; Member of the Indo-Czech Cultural Exchange Programme (1985); Visitorships from the British Council (1985 and 1990) for research work at the Natural History Museum (London) and the University of East Anglia, UK; Visiting Scientist, USDA, Maryland, USA (1990); Award of Honour from the Aphidological Society of India (1994); Recipient of "Plaque" (2010) from Tylor & Francis Publishers and the International Journal of Acarology for sustained research on eriophyoid mites; Visiting Professor (2013) from Nanjing Agricultural University and Nanning Agricultural University, China; Biodiversity Excellence Award (2015) from Science and Environment Foundation at the North Bengal University; Lifetime Achievement Award (2019) and Rao Sahib Dr. T.V. Ramakrishna Ayyar Award (2020) for commendable contribution in taxonomy of insects and mites from the B.V. David Foundation; Felicitated as an "Eminent Aphidologist" (2022) during the 11th International Symposium on Aphids held in Poland; Lifetime Achievement Award (2024) by the Entomological Society of India, New Delhi for contribution on insect taxonomy and a few more.

Prof. Chakrabarti attended many national and international symposia and conferences in India and

abroad, delivered keynote addresses and lead lectures, and also chaired many sessions. He also served as a member of many scientific committees. He visited many countries (Asia, Australia, Europe, North America) on academic assignments.

Prof. Chakrabarti was a Fellow of five Learned Societies besides member of another five societies. He also served as the President and Vice President of the Aphidological Society of India; Vice President of the Acarological Society of India and the Zoological Society, Kolkata. He was also associated with many scientific journals as a member of the editorial board or serving as reviewer.

Prof. Chakrabarti was not only successful as a researcher, but also established himself as a popular teacher and research guide. His passing leaves an irreplaceable void in the field of Indian entomology and zoological sciences. He is survived by his disciples and countless admirers in India and around the world.

Bidhan Chandra Das

Formerly Professor, Dept. of Zoology,
University of Rajshahi, Bangladesh.

A stylized illustration of a woman with long, wavy blonde hair and large black-rimmed glasses. She is wearing a green short-sleeved shirt with a palm tree pattern and dark camouflage pants. She is holding a thin stick or branch in her right hand. The background is a vibrant jungle scene with green foliage, yellow flowers, and a blue sky with white clouds. In the upper right, a monkey is hanging from a tree branch. In the lower right, a tiger is partially visible.

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Publication Information

ZOO'S PRINT, ISSN 0973-2543

Published at: Coimbatore

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Owner: Zoo Outreach Organisation, 3A2 Varadharajulu Nagar, FCI Road, Ganapathy, Coimbatore, Tamil Nadu 641006, India.

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