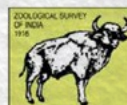


ZSI E-News

Vol. 83 | December 2025 | Monthly E-Newsletter from Zoological Survey of India





from the Director's Desk

Dear Readers,

As we begin the New Year 2026, I would like to express my heartfelt appreciation and warm greetings to the entire members of the Zoological Survey of India family, our collaborators, as well as our well-wishers. As we enter into yet another year of our commitment and services to the nation, I feel grateful to each one of you for your unflinching cooperation in our continued success at ZSI.

I am delighted to present the successful publication of the December 2025 edition of e-newsletter of the Zoological Survey of India, which highlights the vibrant and dynamic events taking place within our organisation. The e-newsletter aptly captures our nation-wide efforts made in faunal exploration, identification, documentation, and discovery, reflecting the scientific acuity and field-level expertise of ZSI. The Newsletter also highlights our remarkable contributions in faunal inventories, documentation of biodiversity, scientific publications, as well as our conservation efforts. All these contributions are a reflection of the tireless efforts made by our scientists, researchers, and other supporting staff in enhancing our knowledge base on faunal diversity in India, as well as their contributions towards biodiversity conservation.

Zoological Survey of India organized a training programme on "Awareness on Protected Animals of India-IUCN list, Legislative Measure for Protection" for the officers and staff belonging to department of enforcement from 3rd to 5th

December 2025, where Smt. Sushmita Gayen, Additional District and Session Judge graced the inaugural session as the Chief Guest and Smt. Tripti Shah, IFS, Director, Zoological Garden as the Guest of Honour. Half Yearly Progress Monitoring Committee Meeting for HQ Sections of ZSI, Kolkata was held from 10th to 12th December 2025 at ZSI, Kolkata. During this month, scientists and researchers at ZSI have identified a total of 1570 species of faunal communities covering diverse ecosystems of India during this month. The current identifications include six new species, which comprises of one new Caecilian species, two new Polychaeta species, one species of Leech, and two new Ant species. The most significant identification is an identification of one fish species, which is newly recorded in India.

Congratulations to all of you on producing this informative and impactful e-newsletter, and I do hope you all continue to have enthusiasm, innovation, and excellence in the coming months. With renewed hope and confidence in our collective capabilities, I extend my best wishes to all for a productive, successful, and fulfilling New Year.

Jai Hind,

Dr. Dhriti Banerjee
Director
5th January 2026
Kolkata

Cover: *Calotes versicolor*
(Daudin, 1802)

Courtesy: ZSI/ FBRC, Hyderabad

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HEADQUARTERS, KOLKATA

Survey tours were conducted to West Bengal, Nagaland, Uttar Pradesh and Meghalaya. A total of 429 species of faunal communities belonging to Acanthocephala, Arachnida, Diptera, Hymenoptera, Orthoptera, Mantodea, Phasmida, Mollusca, Platyhelminthes, Ephemeroptera, Odonata, and Nematelminthes were identified.

A total of seven species of Nematelminthes, Hymenoptera, and Mantodea were augmented to National Zoological Collections (NZCs). Apart from these, nine species of archaeological specimens were identified. Identification and Advisory services were rendered to Vidyasagar University, West Bengal.



Pallas's squirrel at Balpakram NP

NORTH EASTERN REGIONAL CENTRE, SHILLONG, MEGHALAYA

Survey tour was conducted to Balpakram National Park, South Garo Hills, Meghalaya from 4th to 10th December 2025. Local surveys were conducted to Sung Valley, West Jaintia Hills, Meghalaya and Risa Colony Forest, East Khasi Hills, Meghalaya on 5th December 2025. A total of 88 species of faunal communities belonging

to Araneae, Amphibia, Coleoptera, Chiroptera, Hemiptera, Orthoptera, Odonata, and Pisces were identified. Identification and Advisory Services were rendered to three different educational institutions. A tri-monthly Hindi Workshop was organized in the Centre on 30th December 2025.



A panoramic view of Balpakram National Park, Meghalaya

WESTERN REGIONAL CENTRE, PUNE, MAHARASHTRA

Survey tour was conducted to the Southern Western Ghats from 7th December to 20th December 2025. A total of 89 species of faunal communities belonging to Blattodea, Crustacea, Coleoptera, Hymenoptera, Lepidoptera, Mollusca, Myriapoda, Mammalia, and Pisces were identified. A Caecilian species, *Gegeneophis valmiki* Dinesh, Shikalgar, Adhav, Jadhav and Kulkarni, 2025 (Gymnophiona:

Grandisonidae) was described as new to science. One Identification and Advisory services was rendered. A total of 12 DNA barcodes were submitted to NCBI. A total of 231 visitors, including students from various educational institutions, visited the museum of the centre. एक घंटा श्रमदान के अंतर्गत 9 दिसंबर 2025 को पश्चिमी प्रादेशिक केंद्र, पुणे परिसर में स्वच्छता अभियान का आयोजन किया गया।



An event at the centre

CENTRAL ZONE REGIONAL CENTRE, JABALPUR, MADHYA PRADESH

A total of 128 species of faunal communities, including Coleoptera, Lepidoptera, Orthoptera, Odonata, Hemiptera, and Pices were identified. A total of 65 visitors visited the museum of the centre.



Black headed ibis, *Threskiornis melanocephalus* (Latham, 1790) at Kanha National Park



Tiger, *Panthera tigris* (Linnaeus, 1758), in Mukki range, Kanha National Park

DESERT REGIONAL CENTRE, JODHPUR, RAJASTHAN

A local survey tour was conducted to Todgarh–Raoli Wildlife Sanctuary, Rajasthan on 3rd December 2025. A total of 105 species of faunal communities belonging to Hemiptera, Hymenoptera, Lepidoptera, Coleoptera, Orthoptera, Mollusca, and Pisces were identified. Identification and Advisory services were

rendered to Dr. B. Lal institute of Biotechnology, Jaipur and BN Sarda Science, College, Maharashtra. A total of 284 visitors visited the museum of the centre. Third quarterly (Oct-Dec, 2025) Hindi Karyanvan Samiti meeting and Hindi Karyashala were organized on 18th and 22nd December 2025 respectively.



Forest Guard visit to the Museum of the Centre



Hindi Karyashala organized and distribution of prizes to winners of Competition

NORTHERN REGIONAL CENTRE, DEHRADUN, UTTARAKHAND

Survey tour was conducted to Asan Conservation Reserve, Uttarakhand on 24th December 2025. A total of 75 species of faunal communities belonging to Phthiraptera, Lepidoptera, Odonata, Coleoptera, Diptera, Pisces, and Mammalia were identified. The Centre organized “Mission Life Programme- Save Water, Save Electricity, Cleanliness Drive” and “Ek Ped Maa Kae Naam Campaign” during this month.



Ruddy Shelduck, *Tadorna ferruginea* (Pallas, 1764) at Asan Conservation Reserve, Uttarakhand



Visit of Trainees and Faculty of Rajasthan Forestry and Wildlife Training Institute, Alwar, Rajasthan

SOUTHERN REGIONAL CENTRE, CHENNAI, TAMIL NADU

Survey tour was conducted to Anamalai Tiger Reserve, Tamil Nadu and a local survey was conducted to the Poondi Reservoir and Puzhal Lake. A total of 234 species belonging to Crustacea, Ephemeroptera, Hemiptera, Lepidoptera, Odonata, Orthoptera, Psocoptera, Mollusca, Pisces, Amphibia, Reptilia, Aves, and zooplankton were identified. Confiscated specimens containing Tarantula spiders were identified for Chennai Customs. Advisory and identification services on molluscs and freshwater crabs were provided to the Dr. A.L.M. Post Graduate Institute of Basic Medical Sciences, University of Madras, Taramani, Chennai, and to the Department of Zoology, University of Madras, Guindy Campus, Chennai, respectively.



Nilgiri Langur



Nilgiri Tahr

GANGETIC PLAINS REGIONAL CENTRE, PATNA, BIHAR

Survey tour was conducted to Vikramshila Gangetic Dolphin Sanctuary from 14th to 24th December 2025. A local survey was also conducted to Kanwar Lake, Begusarai on 6th and 7th December 2025. A total of 91 species of faunal communities belonging to Testate Amoeba, Insecta, Mollusca, and Pisces were identified during this month. About 300 graduate and postgraduate students from Patna University, Patliputra University, and Sri Arvind Women's College, Patna visited the museum of the centre and participated in the Biodiversity Exposure Programme organized by Prem Youth Foundation on 26th December 2025.



A flock of Greater Adjutant, *Leptoptilos dubius* (Gmelin, JF, 1789)



Panoramic view of Kanwar Lake, Begusarai, Bihar

HIGH ALTITUDE REGIONAL CENTRE, SOLAN, HIMACHAL PRADESH

A total of 86 species of faunal communities belonging to Hemiptera, Lepidoptera, Coleoptera, Trichoptera, Orthoptera, Hymenoptera, and Fishes were identified during this month. A total of seven DNA sequences have been submitted to NCBI. Identification and Advisory Service Was rendered to Department of Fruit Science, Punjab Agricultural University, Ludhiana, Punjab. Dr. Swaroop Singh, Officer-in-Charge, Central Integrated Pest Management Centres (CIPMCs), Directorate of Plant Protection, Quarantine & Storage, Chambaghat, Solan visited the centre on 2nd December 2025.



Male Common Pochard, *Aythya ferina* (Linnaeus, 1758)



Brown headed Barbet, *Megalaima zeylanica* (Gmelin, JF, 1788)

MARINE BIOLOGY REGIONAL CENTRE, CHENNAI, TAMIL NADU

Survey tours were conducted to the Andaman and Nicobar Islands from 15th to 28th December 2025 as part of the project 'Deep-Sea Chondrichthyans of India: Taxonomy, distribution, biology and current status', and to the Lakshadweep atolls from 11th November to 17th December under the programme 'Long-term Coral Reef Monitoring Programme'. A total of 221 species from 611 specimens were added to the collections. Undergraduate students from Cluster University Kurnool, Andhra Pradesh, visited the centre.



Partial recovery of a bleached-dead coral colony in Kavaratti lagoon, Lakshadweep



Survey at the Andaman and Nicobar Islands - BRUV operations at Marine National Park, Wandoor

ANDAMAN AND NICOBAR REGIONAL CENTRE, SRI VIJAY PURAM, ANDAMAN AND NICOBAR ISLANDS

One long-term surveys were conducted to Great Nicobar Island (from 1st to 31st December 2025 and nine-day local surveys conducted to study the terrestrial and Marine Faunal Diversity. A total of 265 species of faunal communities belonging to Coleoptera, Hemiptera, Lepidoptera, Odonata, Mammalia, Reptilia, Aves, Decapoda, Chordata, Annelida, Echinodermata, Mollusca, Thecostraca, Stomopoda, Scleractinia, and Ctenophora were identified. A total 147 visitors including students and teachers of various educational institution visited the museum of the centre. One day workshop on Official Language "Noting & Drafting in Hindi routine official works" was organized on 26th December 2025 at the centre. Wildlife Conservation Day was celebrated at Conference Hall of Veterinary Hospital Junglighat with a multi-faceted program aimed at linking animal health, human health, and cultural practices to biodiversity protection on 4th December 2025. An awareness programme highlighting the critical importance of energy conservation was organized on the occasion of National Energy Conservation Day on 13th December 2025 at Gram Panchayat Humfrygunj.



White-bellied Sea Eagle, *Ichthyophaga leucogaster* (Gmelin, JF, 1788)



Group Photo - One Week Compulsory Training Course for IFS Officers on Coastal and Marine Biodiversity of Island Ecosystem during 8-12 December 2025

SUNDERBAN REGIONAL CENTRE, CANNING, WEST BENGAL

Local survey was conducted to the Sundarbans on 19th December 2025. A total of 42 species of faunal communities belonging to Pisces, Crustacea and Mollusca were identified and deposited in the National Zoological Collections.



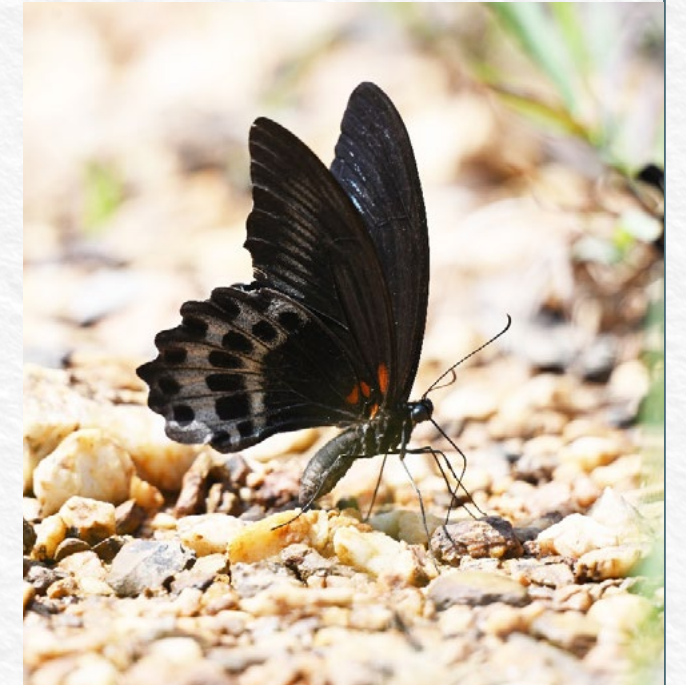
Visit of Audit team at the centre



Visit of Dr. Gertrud Helmut Denzau, Panker, Germany at the centre

FRESHWATER BIOLOGY REGIONAL CENTRE, HYDERABAD, TELANGANA

Survey tour was conducted under the programme "Faunal Diversity of Three Ramsar Wetlands of Madhya Pradesh" from 2nd to 21st December 2025. A total of 90 species of faunal communities belonging to Rotifera, Fishes, Aquatic Coleoptera, Aquatic Hemiptera, Branchiopoda, and Amphibia were identified during this month. A total of 14 DNA sequences have been submitted to NCBI. 'Mission Life' and 'Swachhta Hi Seva Special Campaign 5.0' were conducted to generate awareness among people.



Papilio polymnestor Cramer, 1775 (Blue Mormon)



Papilio polymnestor Cramer, 1775 (Blue Mormon)

WESTERN GHATS REGIONAL CENTRE, KOZHIKODE, KERALA

A local survey tour was conducted Malabar to Botanical Garden on 18th December 2025. A total of 75 species of faunal communities belonging to Testate Amoeba, Coleoptera, Hymenoptera, Lepidoptera, and Pisces were identified. Identification and Advisory service was rendered to Department of Zoology, Shivaji University, Kolhapur, Maharashtra. A total of 425 people visited the museum of the centre.



Internship Programme at the centre



Local survey tour to Malabar Botanical Garden

ESTUARINE BIOLOGY REGIONAL CENTRE, GOPALPUR-ON-SEA, ODISHA

A total of 98 species of different faunal communities were identified during this month. Two new species of marine Polychaeta namely *Namalycastis solenotognatha* Pradhan, Villalobos-Guerrero & Mohapatra, 2025 and *Nereis dhritiae* Pradhan, Villalobos-Guerrero & Mohapatra, 2025 were described new to science. One marine fish species, *Bathygobius meggitti* (Hora & Mukerji, 1936) was reported for the first time from Indian waters. A total of 16 DNA barcodes were uploaded in the NCBI database. Students from Khallikote University, Odisha, Udayanath Autonomous College of Science and Technology, Cuttack, B.B. Autonomous Mahavidyalaya, Jupiter Degree College had visited the Centre.



Students from Udayanath Autonomous College of Science and Technology, Cuttack at ZSI/EBRC, Gopalpur-on-Sea.

ARUNACHAL PRADESH REGIONAL CENTRE, ITANAGAR, ARUNACHAL PRADESH

Survey tour was conducted to Borbheel, Namsai district, Arunachal Pradesh from 29th November 2025 to 1st December 2025. One local Survey was also conducted to Sonajuli Community Conservation Forest area on 22nd December 2025. A total of 51 species of faunal communities belonging to Orthoptera, Coleoptera, Odonata, Hemiptera, Hymenoptera, and Pisces were identified. Identification and Advisory Services were rendered to two different educational institutions.



Local survey in Sonajuli Community Conservation Forest area



Training program on Integrated approaches to Ecosystem Assessment: InVEST modelling, Forest Vulnerability Analysis and Remote sensing Application at NERC, G B Pant-NIHE, Itanagar.

MARINE AQUARIUM AND REGIONAL CENTRE, DIGHA, WEST BENGAL

Survey tours were conducted to Digha and adjacent areas, West Bengal from 1st to 5th December 2025 and also to different coasts of West Bengal and Odisha from 12th December 2025 to 20th December 2025. One local survey was also conducted to Talsari, and Udaipur on 12th. A total of 36 species of faunal communities belonging to Nematoda, Mollusca, Polychaeta,

Crustacea, and Echinodermata were identified. Identification and Advisory Services were rendered to two different educational institutions. A total of 3,654 visitors including students from 12 different educational institutions from West Bengal and Odisha visited the museum of the centre.



Officials from the State Forest Training Institute, Govt. of West Bengal at ZSI/MARC



Three Professors from Kostroma State University, Russia visited ZSI/MARC

NEW DISCOVERIES

NEW SPECIES



Gegeneophis valmiki Dinesh et al. 2025



Namalycastis solenotognatha Pradhan, Villalobos-Guerrero & Mohapatra, 2025



Parapatrechina ali Saroj & Mandi, 2025



Nereis dhritiae Pradhan, Villalobos-Guerrero & Mohapatra, 2025



Parapatrechina sohryngkham Saroj & Mandi, 2025

NEW RECORDS



Bathygobius meggitti (Hora & Mukerji, 1936)

PUBLICATIONS

1. Behera, R.K., Mohanty, S.R., Acharya, S., Thathachari, T.K.S., Behera, B., Mishra, S.S., Bineesh, K.K. and Mohapatra A. 2025. A Report on the Meggitt's goby, *Bathygobius meggitti* (Hora & Mukerji, 1936), from a Coastal Habitat in the Bay of Bengal, India. *National Academy of Science Letters*, 1-4.
2. Behera, R.K., Mohanty, S.R., Beura, S., Bineesh, K.K., Mohapatra, A. 2025. First Record of Three Snake Eels (Ophichthidae) from the Arabian Sea. *Journal of Ichthyology*, 1-8.
3. Bhaskar, R., Mohana, S., Swetha, S. and Subramanian, K. A. 2025. Cytochrome c oxidase I (COI) based molecular identification and genetic variation studies in cephalopods from Indian coasts. *International Journal of Fisheries and Aquatic Studies*, **13**(6): 228-236.
4. Binoy, C., Sureshan, P.M. and Copeland, R. S. 2025. Taxonomic reappraisal of the enigmatic genus *Propalachia Bouček* (Hymenoptera: Torymidae) the first confirmed association with mantid oothecae and a new species from southern India. *Zootaxa*, **5725**(3): 409-420.
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16. Mukherjee, B., Mukherjee, A., Naskar, A. and Banerjee, D. 2025. Harnischia complex (Diptera, Chironomidae): systematic notes featuring a new species and two new records from India. *The Canadian Entomologist*, **157**: e49.
17. Pradhan, J., Villalobos-Guerrero, T. F. and Mohapatra, A. 2025. Description of two new species of nereidids (Annelida: Nereididae) from West Bengal, India, Bay of Bengal. *Zootaxa*, **5729** (2): 335-348.
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24. Sengupta, J. and Banerjee, D. 2025. Altitude and habitat influence on species composition: A multivariate approach. *International Journal of Sustainable Biome and Life Care*, **2**(1): 21-25.
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ABSTRACTS

1. Sen, S. 2025. Spiders (Arachnida: Araneae) as natural enemies of tea pests in the tea ecosystem of Meghalaya. Pp. 29. In: Book of Abstracts: National Dialogue on Insects in Agriculture, Health and Environment. Society for Biocontrol Advancement & ICAR-National Bureau of Agricultural Insect Resources, 15-16 December 2025, Bengaluru, India, xiv + 89 pp.
2. Selvaraj, K., Kavaya Yadav, G.A., Vasundhara, J., Sumalatha, B.V. and Rameshkumar, A. 2025. Integrative Taxonomy: A Tool to Unravel Invasive Whiteflies and their Natural Enemies. Pp. 13. In: Book of Abstracts: National

Dialogue on Insects in Agriculture, Health and Environment. Society for Biocontrol Advancement & ICAR–National Bureau of Agricultural Insect Resources, 15–16 December 2025, Bengaluru, India, xiv + 89 pp.

3. Vasundhara, J., Kavya Yadav, G.A., Selvaraj, K., Rameshkumar, A. and Venkatesan, T. 2025. Genomic Workflow for Whiteflies and their Natural Enemies Systematics. Pp. 44. In: Book of Abstracts: National Dialogue on Insects in Agriculture, Health and Environment. Society for Biocontrol Advancement & ICAR–National Bureau of Agricultural Insect Resources, 15–16 December 2025, Bengaluru, India, xiv + 89 pp.

POPULAR ARTICLES

1. Acharya, S. 2025. ପରିବେଶ ସୁରକ୍ଷା ର ଦାୟିତ୍ୱ କାହାର ଥିବ କେତେ? VijiTree, Environmental Special Edition 2025. VijiTree Foundation, Bhubaneswar, Odisha. Pp. 27-29.
2. Sheela, S. 2025. নেওড়াভ্যালির পিঁপড়ে, 56-57 Pp. In: Sinha and Ghosh. 2025. Neora Valley National Park (in Bengali), 1-144 Pp.

MEETINGS ATTENDED

1. Dr. Dhriti Banerjee, Director, ZSI, has been awarded the “Banga Gaurab Samman 2025” in recognition of her exceptional accomplishments and commendable contribution in the field of Science and Technology by All Bengal Reporters’ Club at the Kolkata Press Club of India. A commemorative stamp was released in the name of Dr. Dhriti Banerjee by the Indian Postal Service to honour her leadership. The Director, ZSI attended the 146th meeting of the Governing Body, National Council of Science Museums (NCSM) held at National Science Centre, Delhi on 2nd December 2025; attended the Inaugural Session of a Training programme on “Awareness on Protected Animals of India-IUCN list, Legislative Measure for Protection” organised by Training and Extension Division, ZSI, Kolkata on 3rd

December 2025, in the auspicious presence of Smt. Tripti Shah, Director, Zoological Garden and Smt. Sushmita Gayen, Additional District and Session Judge as the Guest of Honour and the Chief Guest respectively; attended the Valedictory Session of the same training programme on 5th December 2025 at the Annandale Hall of Headquarters, Zoological Survey of India; chaired the Half Yearly Progress Monitoring Committee Meeting for HQ Sections of ZSI, Kolkata from 10th to 12th December 2025; attended a meeting under the Chairmanship of Shri Ved Prakash Mishra, JS (CS-II), MoEF&CC held on 11th December 2025 to discuss the status of court cases of BSI and ZSI; attended the Review meeting on “Documentation of traditional knowledge in wildlife conservation”, focusing on plant based animal health management, developing Wildlife Vision Plan for Viksit Bharat-2047, and Global Best Standards on Wildlife Conservation, hosted by MoEF&CC on 12th December 2025; flagged off the 8th Wildlife Awareness Rally organized by ANUBHAB - an eminent wildlife NGO and delivered a valuable speech on preservation of rich faunal biodiversity and promotion of nature and wildlife awareness in Kolkata; attended the Re-union programme of Ex-Employees of Zoological Survey of India on 19th December 2025; was invited to the 3rd Annual Science Fair held at Jagat Mukherjee Park, Kolkata, on 20th and 21st December 2025 organized by The Satyendra Nath Bose Science Learning Centre, the Democratic Research Scholars’ Organisation (DRSO) and the Breakthrough Science Society, Kolkata Chapter; was invited to a Special Meeting of the Board of Studies of the Department of Zoology held on 24th December 2025 in the Seminar Library of the Department of Aligarh Muslim University, Aligarh.

2. Dr. C. Raghunathan, Scientist- F, ZSI/HQ, Kolkata, offered the comments on the draft scope of pilot study on the deep sea discharge of industrial wastewater in terms of assimilative capacity of marine ecosystem for CPCB on 2nd December 2025; attended the

Training on Awareness of Protected Animals of India, IUCN Red listing, Legislative Measure for Protection and delivered brief lecture on the status of wild animals and its trade on 3rd December 2025; served as a witness for confiscated wildlife material (Sea cucumber) at Chief Judicial Magistrate Court, Port Blair on 8th December 2025; served as a Member Secretary of the Scientific Committee of the Half Yearly Progress Monitoring Committee meeting for ZSI HQ held from 10th to 12th December 2025 at ZSI Kolkata; offered the inputs for a draft Note for the Cabinet in connection with the signing of a MoU between the Ministry of Agriculture and Farmers Welfare of the Republic of India and the Ministry of Agriculture, Fisheries Wealth & Water Resources of the Sultanate of Oman in the field of Agriculture and allied sectors and submitted to the Ministry on 16th December 2025; attended the quarterly review meeting of NIRANTAR at NCSCM, Chennai on 18th December 2025; offered the comments for Notification under Section 38 of the Biological Diversity Act, 2002 - in the state of Jharkhand and submitted to the Ministry on 30th December 2025; provided inputs for the zero draft on SAARC Development Report 2025: Shaping the Future Together for Resilient SAARC (Report for Asian Development Bank, Manila) submitted to the Ministry on 30th December 2025; provided necessary inputs to inputs in the relevant section of Draft Minutes of Meeting – Deep Sea Discharge Study under National Coastal Mission Scheme and submitted to Central Pollution Control Board on 31st December 2025.

3. Dr. C. Sivaperuman, Scientist- F, ZSI/ANRC, Sri Vijaya Puram, attended Passing Board meeting of the Department of Ocean Studies and Marine Biology, Pondicherry University, Port Blair campus on 8th December 2025; attended the 57th Convocation of Madurai Kamaraj University, Madurai on 12th December 2025; attended the Governing Body Meeting at Sri Venkateswara Dental College, Puducherry on 15th December

2025; attended meeting with Chairman and Managing Director of Sri Manakula Vinayagar Medical College, Puducherry on 15th December 2025 in connection with the initiatives of collaborative research works; attended meeting with Dr. Chandra Bhushan Kumar, IAS, Chief Secretary, Andaman and Nicobar Islands on 22nd December 2025; attended meeting of the Court of Pondicherry University on 28th December 2025 at Pondicherry University, Puducherry; attended 30th Convocation of Pondicherry University on 29th December 2025 as a Member of Court of Pondicherry University, Puducherry.

4. Dr. Avtar Kaur Sidhu, Scientist-F, ZSI/HARC, Solan, attended Wildlife Board meeting for Union Territory of Jammu and Kashmir on 29th December 2025, under the chairmanship of Honorable Lieutenant Governor of UT of J&K.
5. Dr. R. H. Raina, Scientist- E, ZSI/DRC, Jodhpur, participated as an invited speaker in the ESI Event 2025 to commemorate the birth centenary of Prof. T.N. Ananthakrishnan under the theme “National Dialogue on Insects in Agriculture, Health and Environment”, organized by Prof. T.N. Ananthakrishnan Foundation, Chennai, Entomological Society for Biocontrol Advancement, Bengaluru & ICAR- National Bureau of Agricultural Insect Resources (NBAIR), Yelahanka campus, Bengaluru held on 15th and 16th December 2025 at Bengaluru, India.
6. Dr. Anil Mohapatra, Scientist-E, ZSI/EBRC, Gopalpur-on-Sea, attended consultative workshop for strengthening the effectiveness of conservation of Biodiversity in Chilika Lake, a Marine managed Area (MMA) under the Bay of Bengal Large Marine Ecosystem (BOBLME-II) Project on 23rd December 2025 at Lemon Tree Premier, Bhubaneswar, organised by State Wildlife Head Quarters, Bhubaneswar.
7. Dr. S.D. Gurumayum, Scientist- E, ZSI/APRC, Itanagar, attended 8th Convocation of Himalayan University on 20th December 2025.
8. Dr. P. C. Pathania, Scientist-E, ZSI/HARC, Solan, attended Specially invited Research

- Degree Committee Meeting (Zoology) of Chandigarh University, held at Chandigarh University, Punjab, on 24th December 2025.
9. Dr. S. D. Paunekar, Scientist-E, ZSI/CZRC, Jabalpur, attended 17th meeting of नगर राजभाषा कार्यान्वयन समिति, कार्यालय क्रं. -2 meeting on 9th December 2025.
 10. Dr. D. S. Suman, Scientist- E, ZSI/EBRC, Gopalpur-on-Sea, attended 3rd meeting of the Expert Committee in on 17th December 2025 under the Chairpersonship of Addl. DGHS on use of *Gambusia affinis* (Mosquito fish) and *Poecilia reticulata* (Guppy) for mosquito control at NVBDC, New Delhi.
 11. Dr. Tamal Mondal, Scientist- D, ZSI/HQ, Kolkata, provided detailed inputs on Notification under Section 38 of the Biological Diversity Act, 2002 - in the state of Jharkhand as required for Ministry of Environment, Forest & Climate Change through ZSI/HQ; provided detailed inputs on Seeking inputs regarding SAARC Development Report (SDR) as required for Ministry of Environment, Forest & Climate Change through ZSI/HQ; provided detailed inputs on Statistical Quality Assessment Framework (SQAF) of Data Governance and Management Issues including Statistical National/International Standards/ Classification as required for Ministry of Environment, Forest & Climate Change through ZSI/HQ; provided detailed inputs on draft Note for the Cabinet in connection with the signing of a MoU between the Ministry of Agriculture and Farmers Welfare of the Republic of India and the Ministry of Agriculture, Fisheries Wealth & Water Resources of the Sultanate of Oman in the field of Agriculture and allied sectors -IMC as required for Ministry of Environment, Forest & Climate Change through ZSI/HQ; provided reply on Unstarred Lok Sabha Question on "National Coastal Mission and Integrated Coastal Zone Management Project" with Diary No. 8745 as required for Ministry of Environment, Forest & Climate Change through ZSI/HQ; provided reply

- on Provisionally Admitted Rajya Sabha Unstarred Dy. No. 80 on State Biodiversity Data Centre in Odisha as required for Ministry of Environment, Forest & Climate Change through ZSI/HQ; attended inaugural and valedictory sessions of "Awareness on Protected Animals of India-IUCN list, legislative measures for protection" on 2nd and 5th December 2025; attended a meeting on Expert Institutions on Deep Sea Discharge Study under National Coastal Mission (NCM) on 19th December 2025; deputed to attend Global Assessment of Ecosystem Red List of Coral Reef- South Asia Regional Assessment organized by IUCN in Colombo, Sri Lanka from 28th November to 1st December 2025.
12. Dr. V. M. Sathish Kumar, Scientist-C, ZSI/GPRC, Patna, attended the Central Government holidays finalization meeting held at Hotel Maurya, Patna, on 23rd December 2025.
 13. Dr. Tanoy Mukherjee, Scientist-B, ZSI/EBRC, Gopalpur-on-Sea, attended the 48th Meeting of the Apex Committee of the R&D Board, Coal India Limited (CIL), held on 22nd December 2025.

TRAININGS ORGANIZED

1. ZSI/HQ, Kolkata, organized skill development training on "Awareness on Protected Animals of India- IUCN list, Legislative Measure for Protection", was organized from 3rd to 5th December 2025.
2. ZSI/ANRC, Sri Vijaya Puram, organized one-week compulsory training course for the Indian Forest Service (IFS) Officers on Coastal and Marine Biodiversity of Island Ecosystem sponsored by Ministry of Environment, Forest and Climate Change, Government of India from 8th to 12th December 2025.
3. ZSI/NRC, Dehradun, organized one day "Training Programme on the studies of Faunal Diversity in India" for 25 Trainees and 02 Faculty of Rajasthan Forestry and Wildlife Training Institute, Alwar, Rajasthan held at ZSI, NRC, Dehradun on 17th December 2025.

4. ZSI/WGRC, Kozhikode, organized a five-day internship program titled "Basics of Animal Taxonomy" for the final year MSc Zoology Students of St. Gregorios College, Kottarakkara, Kollam.
5. ZSI/MARC, Digha, organized a training programme entitled "Marine fauna diversity and conservation from West Bengal Coast" where a total of 25 officials from the Government of West Bengal, Directorate of Forests, Office of the Director, State Forest Training Institute, Hijli, Kharagpur - 721 306, West Bengal, visited ZSI/MARC, Digha on 12th December 2025; Organized a training programme entitled "Marine fauna diversity and conservation" where a total of 25 officials from the Government of West Bengal, Directorate of Forests, Office of the Director, State Forest Training Institute, Hijli, Kharagpur - 721 306, West Bengal visited the Zoological Survey of India, Marine Aquarium and Regional Centre, Digha on 19th December 2025.

TRAININGS ATTENDED

1. Dr. C. Sivaperuman, Scientist- F, ZSI/ANRC, Sri Vijaya Puram, attended one day awareness training on "One Nation One Subscription" organized by Pondicherry University, Puducherry in collaboration with INFLIFNET, Gandhinagar, Gujarat on 19th December 2025.
2. Dr. A. S. Kalawate, Scientist- E, ZSI/WRC, Pune, attended National Dialogue on Insects in Health, Agriculture and Environment held on 15th and 16th December 2025 at NBAIR, Bengaluru.
3. Dr. S. Balakrishnan, Scientist - E, ZSI/ MARC, Digha, attended state level training as Micro Observer i.e. the ensuing Special Intensive Revision at Nazrul Mancha, Southern Avenue, Kolkata - 700 029, West Bengal.
4. Dr. Tamal Mondal, Scientist-D & Dr. R. Chandran, Scientist- C, ZSI/HQ, Kolkata, and Dr. J.S. Yogesh Kumar, Scientist-E, ZSI/SbRC, Canning, attended a workshop on "Global Assessment of Ecosystem Red List of Coral Reefs

- South Asia Regional Assessment", organized by IUCN from 29th November to 1st December 2025 in Colombo, Sri Lanka.
5. Mr. Suman Kumar Saha, Senior Zoological Assistant, Ms. Dipanjana Ghosh, and Ms. Priyanka Das, CSIR Research Fellows, ZSI/HQ, Kolkata, attended a workshop on "QGIS, GIS for BIOS: Application-based learning" from 8th to 9th December 2025, organized by Ecosystem and Ecology Laboratory, Department of Zoology, RKMVC College; attended a workshop on "RGIS, Begin with R: A hands-on workshop for early career learners" from 13th to 14th December 2025, organized by Ecosystem and Ecology Laboratory, Department of Zoology, RKMVC College.

LECTURES DELIVERED

1. Dr. C. Sivaperuman, Scientist- F, ZSI/ANRC, Sri Vijaya Puram, delivered three talks on "An overview of Biodiversity of A & N Islands with special reference to Marine Biodiversity" in the one-week compulsory training course on Coastal and Marine Biodiversity of Island Ecosystem conducted for the Indian Forest Service Officers held during 8th to 12th December 2025 sponsored by the Ministry of Environment, Forest and Climate Change, Government of India.
2. Dr. Gaurav Sharma, Scientist- F, ZSI/NRC, Dehradun, delivered a lecture on "Status of Faunal Diversity and on the Fauna species listed in the Indian Wildlife Protection Act, 1972" to 25 Trainees and 02 Faculty of Rajasthan Forestry and Wildlife Training Institute, Alwar, Rajasthan on 17th December 2025.
3. Dr. D.S. Chand, Scientist- E, ZSI/HQ, Kolkata, delivered a lecture on "Influence of Climate on Orthoptera distribution and Migration" in a two-day SERB (ANRF) sponsored workshop on "Assessment of Locust Migration in India through Geospatial Technology" on 17th December 2025 at Department of Geography, University of Calcutta, Kolkata.
4. Dr. S.D. Gurumayum, Scientist- E, ZSI/APRC, Itanagar, delivered an invited lecture on 'Faunal Biodiversity of Arunachal Pradesh' at

One Day Orientation Workshop for Honorary Wildlife Warden and Member State Board for Wildlife on 3rd December 2025; delivered lecture on 'POSH Act 2013', at Botanical Survey of India, Itanagar on 17th December 2025 as Chief Guest; attended Inaugural program on 3 days training program on Integrated approaches to Ecosystem Assessment : InVEST modelling, Forest Vulnerability Analysis and Remote sensing Application from 18th to 20th December 2025 at NERC, G B Pant-NIHE, Itanagar and delivered a talk on Ecosystem Services as Chief Guest.

5. Dr. Anil Mohapatra, Scientist- E, ZSI/EBRC, Gopalpur-on-Sea, delivered an invited talk on "Importance of Addressing Cryptic Species Complexes Using Modern Systematics: Special Reference to Fishes" in the International Seminar on "Animal Resources: Ecology & Sustainability" on 3rd December 2025 Organised by the Department of Zoology, Utkal University, Vani Vihar, Odisha.
6. Dr. Souvik Sen, Scientist- E, ZSI/HQ, Kolkata, delivered a lecture on "Taxonomy of Spiders" in the international workshop for 'Taxonomy, museology, geospatial techniques, instrumentation and molecular techniques' organised by Government Science College, Jabalpur on 19th December 2025.
7. Dr. N. Marimuthu, Scientist- E, ZSI/HQ, Kolkata, delivered an online Invited lecture entitled, "Systematics on Scleractinia: Application of CAP and LINKTREE" in "Ichthyotaxonomy: Recent Advances and Techniques", conducted by Centre for Peninsular Aquatic Genetic Resources, ICAR-NBFGR, Kochi on 1st December 2025; delivered an online Invited lecture entitled, "Climate Change vs. Indian Coral Reef habitat" in "The Science of the Sea: A fundamental course (30 Hours)", conducted by Sarojini Naidu College for Women, North Dum Dum, West Bengal on 26th December 2025.
8. Dr. Tamal Mondal, Scientist- D, ZSI/HQ, Kolkata, delivered a lecture on "Protected Secrets Guardians Beneath the Waves of Indian

Water" during the 'Awareness on Protected Animals of India-IUCN list, legislative measures for protection' on 4th December 2025.

9. Dr. P.C. Tudu, Scientist- D, ZSI/ MARC, Digha, delivered a lecture on "Marine biodiversity of West Bengal" at two days national seminar on "From crisis to Conservation: Communities, culture, and nature in harmony – pathways to resilient and sustainable ecosystem" organised by Bajkul Milani Mahavidyalaya, in collaboration with Dr. Shyama Prasad Mukherjee University, Ranchi, Jharkhand on 5th and 6th December 2025.
10. Dr. A. Gokul, Scientist- C, ZSI/SRC, Chennai, delivered lecture on "Crustaceans with special reference to Brachyuran Crabs (Taxonomy and Ecology)" at Sathyabama Institute of Science and Technology, deemed to be University, Chennai on 19th December 2025.
11. Dr. V. M. Sathish Kumar, Scientist-C, ZSI/GPRC, Patna, delivered a lecture on 'Objectives, Priorities & Achievements of Zoological Survey of India' as an Invited External Expert at the Ideation Meeting of Patna-based Knowledge Partner Institutions (KnPIs), empanelled by the Bihar State Biodiversity Board (BSBB) on 22nd December 2025.
12. Dr. Sandeep Kushwaha, Scientist-C, ZSI/CZRC, Jabalpur, delivered a lecture on collection preservation and Identification of Animals at Five-day workshop jointly organized by Zoological survey of India Kolkata and Government Science College, Jabalpur from 15th December 2025 to 19th December 2025; delivered lecture on Faunal diversity of Centra India in India International Science Festival (IISF) 2025 – "Vigyan Se Samruddhi: for Aatmanirbhar Bharat" at Panchkula, Haryana on 8th December 2025.
13. Dr. K. Silambarasan, Scientist- B, ZSI/ ANRC, Sri Vijaya Puram, delivered a lecture on "Marine Biodiversity of Andaman & Nicobar Islands: an overview" organised by Headquarters, Coast Guard Region (A&N), Sri Vijaya Puram on 4th December 2025.

PHOTO GALLERY



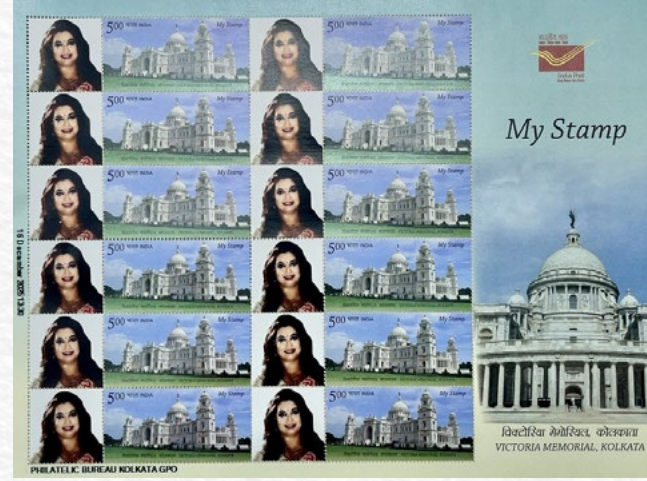
Dr. Dhriti Banerjee, Director, ZSI was awarded the Banga Gourab Samman 2025 by All Bengal Reporters' Club at the Kolkata Press Club of India.



Banga Gourab Samman 2025



Dr. Dhriti Banerjee with the other Awardees



Stamps carrying the name of Dr. Dhriti Banerjee



A commemorative stamp was released in the name of Dr. Dhriti Banerjee, Director, ZSI by the Indian Postal Service



Director, ZSI chaired the Half Yearly Progress Monitoring Committee Meeting of ZSI HQ



Group Photo - Training Programme on Awareness on Protected Animals of India- IUCN list, Legislative Measure for Protection



Felicitation of Smt. Tripti Shah, Director, Zoological Garden by the Director, ZSI



Felicitation of Dr. C. Raghunathan, Additional Director, ZSI by the Director, ZSI



Felicitation of Smt. Sushmita Gayen, Additional District and Session Judge by the Director, ZSI



Director, ZSI flagged off the 8th Wildlife Awareness Rally organized by a well-known NGO Anubhab on 14th December 2025 in Kolkata



Inauguration of the Training Session by Director, ZSI at ZSI Headquarters on 3rd December 2025



Director, ZSI attended the Re-Union of Ex-Employee of ZSI

D.Sc. Degree

Dr. C. Sivaperuman, Scientist-F and Officer-in-Charge, ZSI/ANRC, Sri Vijaya Puram, received the D.Sc. (Doctor of Science) award from Madurai Kamaraj University (MKU), for his contribution towards biodiversity conservation in the Andaman and Nicobar Islands. This award was presented to him by Thiru R. N. Ravi, the Hon'ble Governor of Tamil Nadu and the Chancellor of the Madurai Kamaraj University (MKU) at the 57th Convocation on 12th December 2025.



Dr. C. Sivaperuman receiving D.Sc. (Doctor of Science) Degree by Madurai Kamaraj University (MKU), Madurai

T.N. Ananthakrishnan Award for Senior Scientist 2024-25

Dr. Navneet Singh, Scientist-E, ZSI/HQ, Kolkata, has been conferred the Professor T.N. Ananthakrishnan Award for Senior Scientist 2024-25 in recognition of his exemplary contributions to Indian entomology. He received the award at the National Dialogue on “Insects in Health, Agriculture, and Environment,” which was conducted in Bengaluru. Dr. Singh, a prominent Lepidoptera taxonomist in the Indian subcontinent, has made profound progress in the fields of moth and butterfly taxonomy and ecology. With his tireless efforts since 2010, he has described many new taxa, including one superfamily, one family, 20 genera, and 191 species. He has published numerous monographs, books, and more than 230 scientific papers. His path-breaking contributions include the compilation of an online checklist of 13,124 Indian Lepidoptera species, in addition to his research work on the unexplored aspect of the critical contribution of moths in pollination and pollen transfer.



Dr. Navneet Singh receiving the prestigious Professor T.N. Ananthakrishnan Award for Senior Scientist 2024-25

An Enduring Legacy

A Tribute to Dr. Asish Kumar Ghosh (1938–2018)
Former Director,
Zoological Survey of India
Ministry of Environment, Forests and Climate Change

Dr. Asish Kumar Ghosh, a giant among Indian environmental scientists, passed away on 2nd April 2018 in Kolkata, shortly after his 80th birthday. Born on 15th February 1938, he lived a full and vigorous life devoted to biological research, conservation, and environmental advocacy. Dr. Ghosh, a prolific reader and orator par excellence, had become silent for a brief period as he battled throat cancer. His death marked the irreplaceable loss of an eminent environmentalist to Zoological Survey of India, science, society, and particularly to the people of the Sundarbans, whose lives he tirelessly sought to improve.

A man of extreme dimension and a powerhouse of knowledge in his field, Dr. Ghosh was renowned for his multidisciplinary approach, challenging the barriers between various fields of study. He was the former Director of the Zoological Survey of India (ZSI) and the founder Director of the Centre for Environment and Development (CED). He was also the Honorary President of ENDEV – Society for Environment and Development, established in 1997.



EARLY LIFE, EDUCATION, AND PATRIOTIC RETURN:

Dr. Ghosh's commitment to his country was established early in his career. He lost his parents at a very young age and was raised by his four elder sisters. He received his early education in Rourkella, Odisha. He completed his undergraduate studies at Bangabasi College before pursuing higher education at the University of Calcutta, where he earned his graduation (1957), Masters (1959), and Ph.D. (1964) in Zoology. He worked as a lecturer in an undergraduate college in Kolkata for a brief time, and also served as a lecturer in the Department of Zoology at the University of Calcutta for a few years.

Demonstrating his early academic brilliance, Dr. Ghosh was awarded a Fulbright Scholarship and Rockefeller Foundation Grantee position. This enabled him to undertake post-doctoral research at the Department of Plant Pathology and Entomology, University of Wisconsin, Madison, USA. His research during this period focused on the complex issue of the 'Long range dispersal of aphid-vectors of plant viruses'.

Despite being offered a job opportunity in the United States after completing his research, Dr. Ghosh chose to return to India, driven by a profound sense of patriotism and a desire to serve the people of his country, even though he faced uncertain employment prospects back home. Upon returning, he joined the University of Calcutta as a Research Officer in a PL 480 Project, continuing his taxonomic research on aphids. His expertise was so globally recognised that his American counterparts, facing an infestation problem of crop aphids, entrusted him with solving the problem in Calcutta, requiring him to study the aphid's life cycle to arrest its spread, a task he successfully completed.

THE PILLAR OF INDIAN ZOOLOGY: SERVICE AT THE ZSI

Dr. Ghosh officially joined the Zoological Survey of India (ZSI) in 1972, as Zoologist (Scientist 'B'). He rose swiftly through the ranks of the government service, and took the leadership of ZSI in August 1992 and retired as the Director of ZSI on 28th February 1996, having headed one of India's premier national surveys.

During his time at the ZSI, Dr. Ghosh initiated significant changes, prioritizing environmental concerns within the taxonomic institution. In the early 1980s, he spearheaded the establishment of the First Environmental Monitoring Wing in ZSI in both Calcutta and Madras. He was

instrumental in developing the Eastern Regional Station, ZSI, Shillong, and subsequently became the key-person of ZSI's Meghalaya unit. Known for his leadership, he routinely encouraged junior staff, occasionally bending protocol to enable talented scientists to gain foreign travel and training opportunities.

His commitment to environmental justice sometimes transcended the conventional bounds of public service. While still in office, Dr. Ghosh exhibited remarkable courage by submitting an affidavit supporting the public during a critical wetland case in Kolkata. He was cited in reports referring to Calcutta's urban dilemmas and wetlands, suggesting that the state government eventually agreed to declare 5,000 hectares as wetlands of national importance.



TAXONOMIC AND SCIENTIFIC CONTRIBUTIONS:

Dr. Ghosh's commitment to his country was established. Dr. Ghosh's foundational research lay in the field of taxonomy, particularly focusing on Aphids (Homoptera: Aphidoidea/Thysanoptera). He served as the President of the Aphidological Society of India.

Dr. Asish Kumar Ghosh's foundational and enduring contribution to zoological research lies in the taxonomy of aphids (Homoptera: Aphidoidea/Thysanoptera). He was internationally recognized as an expert in this field, demonstrated early in his career by his post-doctoral work at the University of Wisconsin, USA, as a Fulbright Scholar and Rockefeller Foundation Grantee. His research during this period focused on the complex topic of 'Long range dispersal of aphid-vectors of plant viruses'.

His most significant legacy in systematic entomology is his pivotal role in publishing the definitive reference series on Indian aphids, primarily through the Zoological Survey of India (ZSI). His major systematic work includes authoring seven 'Fauna Volumes' on Indian Aphids published by the ZSI. This monumental work culminated in the release of the final and the 8th volume of the Fauna of India: Homoptera: Aphidoidea. This extensive volume, spanning 835 pages, was co-authored with Dr. L. K. Ghosh. The successful completion and release of this 8th volume occurred on 14 December 2017, shortly before his death.

In addition to this monumental series, Dr. Ghosh was a prolific scientist whose first scientific article was published in 1958. He accumulated over 400 research papers and contributed to approximately 10 books and monographs. His focused work included studies on the Biotaxonomy of Greenideinae (Homoptera: Aphidoidea). Recognizing his standing in the discipline, Dr. Ghosh also held the distinguished position of President of the Aphidological Society of India. The completion of the eight volumes of the Fauna of India stands as a definitive culmination of his life-long dedication to insect taxonomy. His publications spanned 10 countries, including the UK, USA, Japan, and Russia.

Beyond taxonomy, his works extensively covered Biodiversity Conservation, Natural Resource Management, and all dimensions of environment and development. Key areas of focus included:

- » **Urban Ecology:** He authored works like Urban ecology: a case study of Calcutta (1988) and Ecology and environment of Calcutta (1991). He wrote extensively on the 'Wetland Ecosystem' and specifically, the 'Wetland in Calcutta Metropolitan District'.

- » **Biodiversity Assessment:** He co-edited Faunal Diversity in the Thar Desert: Gaps in Research and An Assessment Manual for Faunal Biodiversity in South Asia (1997). He also published a Status Report on Biodiversity in India in 1997.
- » **Sundarbans and Climate Change:** His published research detailed the Climate Change and Threat to Biodiversity in Sundarbans (2002), investigated the Role of Zooplankton and Impact in Higher Tropic Levels in Indian Sundarban Delta (2016), and provided a State of Art Report on Biodiversity in Indian Sundarbans.

GLOBAL POLICY AND ADVISORY ROLES:

Dr. Ghosh was highly influential in national and international environmental governance. He had served as a consultant to major global organizations, including The World Bank, UNDP, UNEP-GEF, and DFID.

During his career, he led numerous international delegations and participated in crucial global summits:

- » **1992–1996:** Led the Indian Delegation to the Ramsar Convention on International Wetlands in Japan.
- » **Member of Indian Delegation:** Attended the Asian Wetlands Conference (Malaysia), Indo-Russia Forest Meet (Russia), IUCN General Assembly (Argentina), and other International Meets in Kenya, China, France, Mexico, and Spain.
- » **Project Director (1996–97):** Imparted training on Faunal Biodiversity Assessment in 7 South East Asian countries, supported by SACEP-NORAD.

Nationally, Dr. Ghosh played a vital role in shaping environmental legislation. He took an active and important role in formulating the Indian Biodiversity Act-2002 and its Rules in 2004. He served as a Member of the National Biodiversity Authority (NBA) from 2003 to 2009 and was a Member of the Expert Group on Access and Benefit Sharing for NBA. He was also a consultant for UNDP-MoEF on the implementation of the Biological Diversity Act in various states.

He served as an Expert Member on over 30 Government of India Committees, including the Working Group for the Eleventh Five-Year Plan on Environment & Biodiversity. He was also deputed to the GEAC (Genetic Engineering Appraisal Committee) to consider proposals related to the application of Biotechnology, especially concerning the introduction of GM food crops.

In 2009, he was invited to Paris to Chair a 20-country UNEP-CBD meet focused on the Implementation of Article 11 regarding Incentives and Disincentives in Biodiversity Conservation.

THE LEGACY OF ENDEV AND CED:

After retiring from ZSI, Dr. Ghosh poured his considerable energy into his own research organization, the Centre for Environment and Development (CED), and the affiliated ENDEV – Society for Environment and Development (Estd. 1997). Based in Jodhpur Park, Kolkata, this organization successfully completed numerous national and international projects and received national and international recognition.

ENDEV and CED, under his leadership, achieved several prestigious distinctions:

- » **The World Bank Honors (2007):** Recognized for the Best Innovative Programme regarding "Grassroot initiatives for Management and Protection of Natural Resources".
- » **Judges' Award (2013):** Won an International Competition (among 37 countries) for showcasing the Best Case Study on "Adapting to Climate Change for Food Security," presented by The Nature Conservancy, Washington D.C., USA.
- » **5th Earth Care Award (2014):** Received for "Community Services" related to work in the Indian Sundarbans Delta.

His work through ENDEV/CED primarily focused on the lives and livelihoods of the people in the Indian Sundarbans.

Advocacy for Climate Refugees and Biodiversity:

Dr. Ghosh's efforts in the Sundarbans post-Cyclone Aila in 2009 were particularly impactful. He launched several projects to assist the affected population. Most notably, he led the endeavor to revive long-forgotten traditional paddy seeds capable of growing in brackish water, an innovation that became a "life saver" and won the aforementioned World Bank honour for best innovation globally.

He was a fervent voice for the climate refugees in the Sundarbans, a region battered by erosion, storm surges, and saline water intrusion, forcing mass migration. He fiercely criticized the fact that neither the National Action Plan on Climate Change nor the West Bengal Climate

Change Action Plan addressed the vital need for planned resettlement and rehabilitation of these displaced people.

Dr. Ghosh was also a pioneer in grassroots biodiversity documentation. He acted as the Principal Coordinator for the People's Biodiversity Register (PBR) of Kolkata (2010), making it the first metro-city in India to have such a register. This followed his earlier role coordinating a UNDP-GEF-SGP sponsored project for preparing PBRs in 10 villages across West Bengal (2000–02). He successfully championed a project proposal for the "Urban Biodiversity Study in and around Calcutta" originating from Bangabasi College, which was later published as a book by the ZSI in 2010.

In his later years, CED continued to be sought after for its specialized expertise, undertaking projects such as surveying the Sarus Crane population in Madhya Pradesh (2013–2015) and preparing PBRs in East Khasi Hills for the Meghalaya Biodiversity Board. His last completed project was in Tripura in 2017. Until his death, he was actively involved in the international DECMA project in association with Jadavpur University.

ACADEMIC MENTORSHIP AND CONSULTING INFLUENCE:

Dr. Ghosh was deeply committed to teaching and mentoring the next generation of researchers, supervising a dozen Ph. D. students. He served as a Visiting Faculty Member across several esteemed institutions, often acting as a guest faculty at IIM-C, WBNUJS, West Bengal State University, Indian Maritime University, and IISWBM.

His long-standing academic roles included being an acting Visiting Faculty at The School of Environmental Studies and The School of Oceanographic Studies, Jadavpur University, and the Department of Human Rights at the University of Calcutta. He was a senior most Visiting Faculty Member in the Department of Environmental Biotechnology at Jadavpur University since its inception, guiding major programmes such as Bio-prospecting of Microbial organisms and Bio-remediation of Chromium in agricultural soil in the Indian Sundarbans.

In recognition of his widespread contributions, Dr. Ghosh received several Lifetime Achievement Awards, including those from The Zoological Society, Calcutta (2014) and the Allen Foundation (2016).

A LIFE LIVED FULLY:

Dr. Ghosh was revered not only for his professional achievements but also for his exceptional character. He was described as being punctual, strict in his endeavours, methodical, authoritative, and a workaholic, choosing to continue working even during his final days of physical agony, such was his dedication. He was a man of great vision, embodying secular thoughts and condemning discrimination based on caste, creed, sex, and religion. He was known for his jovial nature, caring attitude, and excellent oratory skills. He enjoyed reading the works of Rabindranath Tagore, which influenced him immensely.

Dr. Ghosh endured difficult personal losses late in life, including the untimely death of his brother in December 2015 and the passing of his aunt in June 2016, all while battling his own cancer diagnosis from August 2015. Yet, he persevered with unwavering will power and passion.

He was widely regarded as a guiding figure—“like the great banyan tree that harbours people of various backgrounds”—who shaped the careers and lives of many

students and colleagues both in India and abroad. He championed inter-disciplinary studies, refusing to confine himself to a single subject.

Dr. Asish Kumar Ghosh was honoured by the West Bengal Biodiversity Board for his contribution to Biodiversity Sustenance Conservation on International Biodiversity Day, 22 May 2014. His thoughts and ventures were ahead of time. His monumental contributions, particularly in linking scientific knowledge to environmental policy and local livelihood security, ensure that his memory remains fresh and vivid through his books, hundreds of articles, and tangible achievements, particularly among the Sundarbans community whose lives he dedicated himself to improving.

May his soul rest in peace.

Dr. K. Venkataraman

Former Director

ZSI