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### From the Director's Desk

In today's ever-changing world, where new scientific discoveries and advancements are made on a daily basis, it is crucial to stay updated with the latest information. Scientific e-news publications play a vital role in providing scientists, researchers, and those with a curious mind a platform to access relevant, insightful, and thought-provoking articles in the field of science. Scientific e-news publications act as a connection between the scientific community and the general public. They bring cutting-edge research, groundbreaking experiments, and pioneering discoveries to a wider audience, making complex scientific concepts accessible and easily understandable. By covering various scientific disciplines comprehensively, these publications cater to a diverse range of interests and ensure that there is something for everyone.

> ZSI is pleased to introduce the latest edition of ZSI E-News for January 2024. This newsletter provides an insight into the activities and recent developments of ZSI,

highlighting our commitment to excellence, innovation, and the ongoing pursuit of knowledge in the field of faunal exploration in India. As we delve into the dynamic realm of faunal diversity, we are honored to share the remarkable endeavors undertaken by ZSI.

ZSI is honored to host a one-day Capacity Building Workshop in peer-reviewed journals, eight book chapters, and one on the Roles and Responsibilities of Indian CITES Scientific popular article were published during this month. Authorities in implementing CITES, under the guidance of the Ministry of Environment, Forest and Climate Change, These achievements serve as evidence of the diligent Government of India. Additionally, ZSI, Headquarters, efforts, innovative thinking, and unwavering perseverance organized a DST-SERB sponsored High-End Workshopdemonstrated by every individual in ZSI. The unwavering Karyashala on Taxonomy, Ecology, and Conservation commitment and enthusiasm of all the ZSI Scientists and of Indian Spiders. This workshop aimed to disseminate knowledge on spider research among PG students and greater accomplishments together. Ph.D. research scholars, followed by a two-day Hands-on As we venture into the challenges, let us sustain this positive Training on Tricho-Taxonomy to enhance capacity building energy and make further progress. With our combined efforts. Furthermore, ZSI collaborated with ICAR-NBFGR to dedication and resolve, there are no boundaries to what we organize a two-day National Workshop on Advances in Fish can attain. Systematics: Morphological and Molecular Approaches at the Freshwater Biology Regional Centre in Hyderabad, I extend my heartfelt congratulations to everyone for yet as per the provisions of the MoU. In celebration of the another fruitful month! 75th Republic Day, all the officers and staff of ZSI came together. Additionally, the Animal Taxonomy Summit (ATS) 2024 website was launched to commemorate the 109th ZSI Day (Foundation Day). ZSI, Headquarters, along with its 16

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Regional Centres, actively conducted Mission LiFE activities in the office premises and nearby areas to raise awareness. During the month, a total of **1601** species were identified, including the discovery of nine new species, belonging to insects and arachnids, and the documentation of eleven new species records. Moreover, six books, 24 research papers

Staff propel the advancement and motivate to strive for even

Jai Hind,

Dr. Dhriti Banerjee Director 5th February 2024, Kolkata

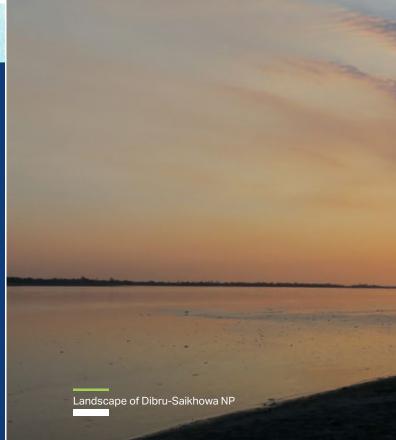


### HEADQUARTERS, KOLKATA

Surveys were conducted in various locations including Ballavpur WLS, Raiganj WLS and Ramnabagan WLS in West Bengal, Great Nicobar Island in Andaman and Nicobar Islands, Dibru-Saikhowa Biosphere Reserve, Assam in Valmiki Tiger Reserve in Bihar, Tamil Nadu, and Dwarka in Gujarat. These surveys aimed to document the diversity of fauna in both terrestrial and marine ecosystems. Additionally, the survey in Dwarka focused on exploring marine fossils. A one-day local survey was also conducted in South 24 Parganas. Throughout the month, a total of 864 species belonging to various groups such as Apterygota, Acari, Arachnida, Chalcididae, Diptera, Formicidae, Ichneumonidae, Hemiptera, Ephemeroptera, Odonata, Dermaptera, Orthoptera, Lepidoptera, Porifera, Cnidaria, Annelida, Echinodermata, Mollusca, Platyhelminthes, Nematoda, Crustacea, Aves, and 9 species of paleozoological samples were identified. Notably, four new species of Arachnida were discovered and reported as new to Science. Additionally, six species of Collembola and two species of Nematodes were recorded as new to the Indian fauna. Furthermore, a total of 62 species from faunal communities belonging to Lepidoptera, Platyhelminthes, Hemiptera, and Echinodermata were added to the NZCs (National Zoological Collections). The identification and advisory services provided by the organization extended to various institutions including VC College, Rahara, Department of Environmental Studies at Visva Bharati University in Santiniketan, Kohima Science College in Nagaland, Department of Environmental Science at the University of Calcutta, Department of Zoology at General Degree College in Singur, and Girijananda Chowdhury University in Assam. Furthermore, identification reports were sent to the Forest Department of West Bengal and the Customs Department stationed at Bagdogra Airport for three cases involving Aves. Visitors from St. Anthony College in Shillong, Digboi College in Assam, B.Borooah College in Assam, D.K. College in Assam, General Degree College in Singur, CMLRI in Kochi, Kerala, and College of Fisheries in Shirgaon, Ratnagiri, Maharashtra visited different sections of the headquarters.







### NORTH EASTERN REGIONAL CENTRE

### Shillong, Meghalaya

A survey was conducted to Dibru-Saikhowa Biosphere Reserve, Assam. A total of 99 species of faunal communities belonging to Arachnida, Hemiptera, Orthoptera, Odonata, Mollusca, Decapoda, Pisces, Amphibia, Reptilia and Mammalia were identified during the month. Advisory services were provided to Niket Alashi, Content Editor and to HerpClub. The staff of this office conducted a roadside campaigning of Mission LiFE programme at RISA Colony, Shillong.



### WESTERN REGIONAL CENTRE

Pune, Maharashtra



A total of 115 species of faunal communities belonging to Diptera, Hemiptera, Hymenoptera, Lepidoptera, Coleoptera, Mollusca, Crustacea, Amphibia and Pisces were identified during the month. Identification and advisory services were rendered to Van Kshetrapal, Raigad district, Maharashtra, Range Forest Officer, Washala, Thane district, Maharashtra, Range Forest Officer, Dolkhamb, Thane district, Maharashtra and to CSIR-NEERI, Kolkata. World Hindi Day and Republic Day were celebrated at the centre



Celebration of Republic Day



Crimson marsh glider, Trithemis aurora



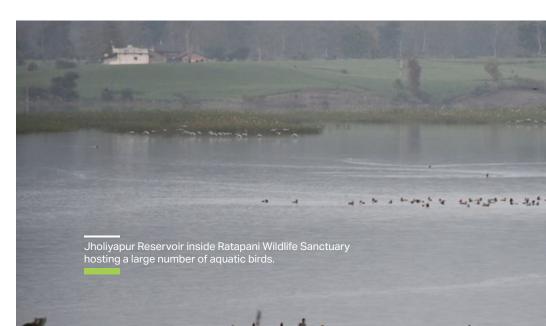
Sphinx moth, Ambulyx belli

### CENTRAL ZONE REGIONAL CENTRE

### Jabalpur, Madhya Pradesh



75th Republic day celebrated at ZSI CZRC Jabalpur.



Two species of Hemiptera were recorded new to Indian fauna. A survey was conducted to Gandhi Sagar Wild Life Sanctuary, Mandsaur and Ratapani Wildlife Sanctuary, Raisen of Madhya Pradesh including Distt. Sehore & Raisen. A total of 80 species of faunal communities belonging to Orthoptera, Lepidoptera, Hemiptera, Mollusca, Pisces and Amphibia were identified during the month. Identification and advisory services were rendered to JNKVV, Jabalpur and Indira Gandhi National Tribal University, Madhya Pradesh. World Hindi Diwas was celebrated under the title "Traditional knowledge to Artificial Intelligence" and Republic Day was also celebrated at the centre.



### NORTHERN REGIONAL CENTRE

Dehradun, Uttarakhand



A total of 72 species of faunal communities belonging to Protozoa, Phthiraptera, Lepidoptera, Hymenoptera, Pisces and Amphibia were identified during the month. Mission LiFE activities were conducted by sapling plantation, cleaning of ZSI hoardings, maintenance of plantation and protection with Tree Guards on the Kaulagarh main road of Dehradun. Special Campaign 3.0 swachhta/cleanliness awareness drive was conducted in and around the office campus and at Kaulagarh Market, Dehradun. The centre celebrated Republic Day on 26th January, 2024.



Royle's Pika, Ochotona roylei Ogilby, 1839





Gallus sonneratii

**ZSI E-News** 

### SOUTHERN REGIONAL CENTRE

### Chennai, Tamil Nadu

A survey was undertaken in the Western Ghats of Tamil Nadu. A total of 134 species of faunal communities belonging to different groups were identified during the month. A total of 49 DNA barcodes of different faunal groups were generated.





### GANGETIC PLAINS REGIONAL CENTRE

#### Patna, Bihar

A survey was undertaken in the Baraila Lake and Bhimbandh WLS of Bihar. A total of 44 species of faunal communities belonging to Insecta, Mollsca, and Pisces were identified during the month. Identification and advisory services rendered to the Department of Agriculture, Aligarh Muslim University, Aligarh. The centre celebrated Republic Day on 26th January, 2024.



Celebration of Republic Day

### HIGH ALTITUDE **REGIONAL CENTRE**

Solan, Himachal Pradesh



One species of Trichoptera was described as new to science from India. A total of 70 species of faunal communities belonging to Insecta and Pisces were identified during the month. National Voters' Day and Republic Day were celebrated at the centre.

Hoisting



A survey tour to Lakshadweep atolls was conducted. A total of 26 species of faunal communities belonging to Porifera, Mollusca, Crustacea, and Pisces were identified during the month. Identification services were rendered to AYUSH Institute, Chennai and Alagappa University, Karaikudi, Tamil Nadu. Four students from Bharathidasan University, Trichy, attended an internship at MBRC on the collection, identification and preservation of various marine fauna.

Arothron stellatus- Stellate puffer (Bloch and Schneider, 1801)

Participation in field survey tour

Tiranga on 75th Republic day



### MARINE BIOLOGY REGIONAL CENTRE

Chennai, Tamil Nadu



### ANDAMAN **AND NICOBAR** REGIONAL CENTRE

#### Port Blair, Andaman and **Nicobar Islands**

Surveys were conducted to Great Nicobar Island North & Middle Andaman, Little Andaman and South Andaman and to the outer Harbour Port at V.O. Chidambaranar Port Authority, Tuticorin. A total of 126 species of faunal communities belonging to Coleoptera, Hemiptera, Lepidoptera, Odonata Mollusca, and Pisces were identified during the month. Identification and advisory services were rendered to Station Flight Safety Officer (SFSO), INS Utkrosh, Indian Navy, Port Blair and to Department of Environment and Forests, Port Blair.





### **SUNDERBAN** REGIONAL CENTRE **Canning, West Bengal**

A survey was undertaken in Tuticorin Port and one day local survey was undertaken in Sunderbans. A total of 37 species of faunal communities belonging to Cnidaria, Crustacea, Mollusca, and Pisces were identified during the month. Ten days ZSI Stall was displayed in Sunderban Mela. Republic Day was celebrated. Shri Abhijit Roy, Deputy Secretary, UPSC visited Sunderban Regional Center, Canning on 29th January 2024. A one day seminar on "Mangroves associated Fauna from Sundarban" was organized on 5th January 2024 and one day seminar on "Sundarban Mangroves" was organized on 26th January 2024.







Spotted Deer - Axis axis (Erxleben, 1777)





ZSI stall at Sundarban Mela

## **FRESHWATER** BIOLOGY REGIONAL CENTRE

### Hyderabad, Telangana

A total of 50 species of faunal communities belonging to Coleoptera, Hemiptera, Rotifera, Crustacea, Mollusca and Pisces were identified during the month. One species of Hemiptera was recorded new to Indian fauna. A National workshop was organized by the centre on "Advances in Fish Systematics: Morphological & Molecular Approaches" on 18th & 19th January 2024. Three books, Fauna of Kawal Tiger Reserve, Fauna of Amrabad Tiger Reserve and Fishes of River Godavari were published by Director, ZSI during the workshop. Staff and students from Govt. College, Chittur, Palakkad, Kerala and Students and Staff from Viveka Vardhini College, Hyderabad visited FBRC Museum. Mission LiFE and Swachchta Campaigns were conducted to generate awareness.





National workshop on Advances In Fish Systematics : Morphological & Molecular Approaches

### WESTERN GHAT REGIONAL CENTRE

### Kozhikode, Kerala

A total of 71 species of faunal communities belonging to Testate Amoebae, Hymenoptera, Hemiptera, Coleoptera, Dermaptera, Mantodea, Arachnida, and Pisces were identified during the month. Four new species of Mutillidae from India were described as new to science. 75th Republic Day was celebrated at the centre.



Republic Day celebration



### **ESTUARINE** BIOLOGY REGIONAL CENTRE

Linnaeus, 1758) at Bahuda

Gopalpur-On-Sea, Odisha



A total of 107 species of faunal communities were identified. Seventeen DNA barcode belonging to 14 species were uploaded in the NCBI data base. National Bird day was celebrated in the campus and a plantation drive was organized at office campus on the occasion of National Birds Day. Students and faculty members of GIET University visited the centre and gained exposure to zoological collections displayed at museum. Scientists and scientific staff sensitized students about the need of conservation and also about various targeted conservation initiatives being undertaken at the centre. The Republic Day was celebrated in the campus.



### ARUNACHAL PRADESH REGIONAL CENTRE

#### **Itanagar, Arunachal Pradesh**

A total of 69 species of faunal communities belonging to Lepidoptera, Orthoptera, Hemiptera, Pisces, Amphibia, and Reptilia were identified during the month. A survey was conducted to Kane WLS & Yordi-Rabe Supse WLS. Various Mission LiFE activities were conducted at State Forest Research Institute (SFRI), Itanagar.







Book release function at Itanagar Municipal Corporation, Itanagar.



Euphlyctis cyanophlyctis (Scheinder, 1799)





Mission LiFE with intern students at SFRI, Itanagar, Arunachal Pradesh

### MARINE AQUARIUM AND REGIONAL CENTRE

#### Digha, West Bengal

Surveys were conducted to outer Harbour Port at V.O. Chidambaranar Port Authority, Tuticorin, Odisha and West Bengal coast. A total of 93 species of faunal communities belonging to Polychaete, Mollusca, Nematoda, Crustacea, and Pisces were identified during the month. A one day seminar on "Coastal and Marine Biodiversity - Challenges, Threats and their Impacts on Climate Change" was conducted. 75th Republic Day was celebrated. Students of Durgapur MAMC Township Modern High School, B.B. College, Baiganbadia, Odisha Khejuri College, Tapaban Adarsha Siksha Niketan, Sindri, Purulia and Sanatal Bidroha Sardha Satabarshiki Mahavidyalaya, Goaltore, Medinipur visited the museum. Interactive training and demonstration sessions were conducted for the zoology students from Swarnamoyee Yogendranath Mahavidyala, Nandigram and Mugberia Gangadhar Mahavidyalaya, Mugberia.



Zanclus cornutus (Linnaeus, 1758)



Celebration of 75th Republic Day

## NEW DISCOVERIES NEW DISCOVERIES







Odontomutilla vishwanathi





Phintella dentis Sudhin, Caleb & Sen, 2024 female Phintella dentis Sudhin, Caleb & Sen, 2024 male

Phintella handersoni Sen, Sudhin & Caleb, 2024 female Phintella handersoni Sen, Sudhin & Caleb, 2024 male





*Phintella luna* Sudhin, Sen & Caleb, 2024 female *Phintella rajbharathi* Caleb, Sudhin & Sen, 2024 male









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#### BOOKS

- Banerjee, D., Raghunathan, C., Jaiswal, D., Jadhav, S.S., Karuthapandi, M. and Rehnuma, Sk. 2024. Fauna of Amrabad Tiger Reserve, Telangana.1-581pp. (Published by DZSI, Kolkata)
- Banerjee, D., Raghunathan, C., Jaiswal, D., Jadhav, S.S., Karuthapandi, M. and Rehnuma, Sk. 2024. Fauna of Kawal Tiger Reserve, Telangana . 1-555pp. (Published by DZSI,Kolkata)
- 3. Jadhav.S.S., Karuthapandi, M., Deepa, J., Raghunathan, C., and Banerjee, D. 2024. Freshwater Fishes of River Godavari. 1-132 (Published by DZSI, Kolkata)
- 4. Sarkar, U.K. and Banerjee, D. 2024. State fishes of India. 1-24pp. (Published by DZSI, Kolkata)
- 5. Sen, S. and Sudhin, P. P. 2024. A Pictorial Guide on Common Indian Spiders. 1-80pp. (Published by the Director, Zoological Survey of India).
- Bhatnagar, P.S., Kumar, H. and Kushwaha, S. 2023. Short-horned Grasshoppers of Maharashtra (Insecta: Orthoptera) Present in WRC, ZSI, Pune. 1-39pp. (Published by Rathore Academic Research Publications) (ISBN: 978-93-90648-99-3).

#### PAPERS

- Ahmad, A. and Sharma, G. 2023. Egg laying site and oviposition pattern of ischnoceran louse, *Penenirmus pici* Fabricius, 1798 (Insecta: Phthiraptera) parasitizing Black-rumped Flameback, *Dinopium benghalense* (Linnaeus, 1758) (Aves: Picidae). International Journal of Life Sciences Research, 11(4): 35-38.
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- 4. Rana, A. and Mozhui, L. 2023. First report of the longhorn beetle, *Rosalia (Eurybatus) formosa* (Saunders, 1839) (Insecta: Coleoptera: Cerambycidae) from Mizoram, India Journal of Threatened Taxa, 15(12):24447-24450

- 5. Bhatnagar, P.S. 2023. Cheetah reintroduction in relation to SDGs. International Journal of Global Science Research, 10(2): 2183-2187
- Jaiswal, D. and Banerjee, S. 2024. *Ranatra* cardamomensis Zettel, Phauk, Kheam, and Freitag, 2017 (Hemiptera: Nepidae), new record from India. Aquatic Insects--International Journal of Freshwater Entomology, DOI: 10.1080/01650424.2023.2292677
- Datta, R., Rizvi, A.N. and Raghunathan, C. 2023. Two new records of free-living marine nematodes (Nematoda: Enoplida: Ironidae and Monhysterida: Xyalidae) from India. International Journal of Zoology and Applied Biosciences, 8(6): 113-120.
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#### **BOOK CHAPTERS**

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#### **POPULAR ARTICLE**

1. Palot, M.J. 2024. Chola Vanangalile Uragangal (Reptiles of the montane shola-grassland ecosystem). Aranyam, the official magazine of Kerala Forests & Wildlife Department, 44 (5): 24–26.

#### **MEETINGS ATTENDED**

1. Dr. Dhriti Banerjee, Director, ZSI, Kolkata, attended a special program on the New Year 2024 at ZSI, HQ, Kolkata, on 1st January 2024 addressing all the scientists, administrative staff and research scholar of ZSI, HQs and Regional Centres. Director congratulated everyone and shared her experience and expressed gratitude on being in a List of Top 100 women achievers in India in 2023; addressed the inaugural session of Karyashala on 3rd January 2024 a High-End Workshop on Taxonomy, Ecology and Conservation of Indian Spiders from 3rd to 9th January 2024 organised by ZSI at Hqs, Kolkata; inaugurated the Acharya Prafulla Chandra Roy Smarak Vigyan 'Mela O Pradarshni' on 5th January 2024 organised by West Bengal University of Animal and Fishery sciences (WBUAFS) at University Campus, Belgachia, Kolkata; attended a Panel Discussion on 5th January 2024, as an esteemed panellist in a three-days' workshop on 'Basics on Plant Identification and Nomenclature' for the Indian Forest

Service officers organised by Botanical Survey of India, Kolkata at BSI, Kolkata; addressed valedictory session of Karyashala on 9th January 2024 on Taxonomy, Ecology and Conservation of India Spiders; addressed the two-day Hands-on Training on Tricho-Taxonomy on 10th January 2024 organised by Training & Extension Division at ZSI HQs, Kolkata; proposed and organised a one day Capacity Building Workshop on Roles and responsibilities of Indian CITES Scientific Authorities on CITES Implementation supporting the Wildlife Division, MoEFCC involving CITES Scientific Authorities on 8th January 2024 in Kolkata; attended the Review Meeting on the progress of filling up of vacancies under Mission Mode Recruitment hosted by DS (Admin), MoEFCC on 10th January 2024 through virtual mode; inaugurated the Annual Sports 2024 with an inaugural address and by releasing a flock of pigeons into the sky; as Chief Guest, graced the valedictory ceremony of the All India Inter-University Women's Football Tournament 2023-

2024 on 13th January 2024 at Kshudiram Krirangan of Vidvasagar University: empanelled as member of Committee (Advisory) of Vidyasagar University's newly constituted Academic and Advisory Committee of the Centre for Life Sciences; organized the National Workshop on Advances in Fish Systematics: Morphological and Molecular Approaches at Freshwater Biology Regional Centre, Hyderabad on 18th & 19th January 2024 along with ICAR-NBFGR; participated in tour to Seshachalam Biosphere Reserve, Andhra Pradesh on 21st & 22nd January 2024; paid tribute to Netaji Subhas Chandra Bose on his 127th birth on 23rd January 2024; attended a meeting through Video Conferencing mode, related to Review of Expenditure, Pending C&AG Audit Paras and Status of GeM on 23rd January 2024; celebrated 75th Republic Day with a colourful parade and unfurled the National Flag and launched the Animal Taxonomy Summit (ATS) 2024 website; graced the momentous occasion of the 16th Graduation Day of Kongunadu Arts & science College, mark on the graduating class on 27th January 2024; officials at MoEFCC, New Delhi on 29th & 30th January 2024.

5. Dr. C. Sivaperuman, Scientist-E, ZSI/ANRC, Port Blair, Coimbatore, Tamil Nadu as the esteemed chief guest and served as external expert member for selection of shared her experience and thoughts, leaving an indelible project personnel in various research project at ICAR-Central Agricultural Research Institute, Port Blair on attended a meeting with Honorable Minister and Ministry 4th January 2024; attended the inaugural function of National Health Mission Laboratory, RMRC, Port Blair on 8th January 2024; attended the Doctoral Committee meeting at Department of Ocean Studies and Marine 2. Dr. C. Raghunathan, Scientist - F, ZSI/HQ, Kolkata, Biology, Pondicherry University, Port Blair on 8th attended Capacity Building Workshop on Rules and January 2024; attended the Ph.D. Synopsis seminar Responsibilities of Indian CITES Scientific Authorities on at Department of Ocean Studies and Marine Biology, CITES implementation organized by ZSI on 8th January Pondicherry University, Port Blair on 24th January 2024; 2024 at Kolkata; Convened a meeting with FBRC, ZSI, attended as a Court Member of Pondicherry University in Hyderabad on 9th and 10th January 2024 for organizing the Interactive Session with the students on the Theme: the National Workshop on Advances in Fish Systematics: Viksit Bharat@2024 by the Shri. Jagdeep Dhankhar, Morphological and Molecular Approaches held on 18th Hon'ble Vice President of India organised by Pondicherry and 19th January 2024; attended a National Workshop University, Puducherry on 28th January 2024; submitted on Advances in Fish Systematics: Morphological and required information to the Regional Deputy Director, Molecular Approaches held on 18th and 19th January Wildlife Crime Control Bureau, Southern Region, Chennai 2024 organized by ZSI, FBRC, Hyderabad; served as on the Status of Laos Warty Newt (Paramesotriton sp.) a witness for wildlife crime case at the court of Chief (Syn: Laotriton laoensis). Judicial Magistrate, Port Blair on 16th January 2024; delivered a talk on 'Genesis of Fish Taxonomy' in the 6. Dr. Karuthapandi M, Scientist - D, ZSI/FBRC, Hyderabad, inaugural session of a National Workshop on Advances attended Andhra Pradesh Biodiversity Board meeting on in Fish Systematics: Morphological and Molecular 2nd January 2024. Approaches held on 18th and 19th January 2024 organized by ZSI, FBRC, Hyderabad; reply provided to the 7. Dr. Gaurav Sharma, Scientist-E and Mr. Manoj Kumar administrative ministry for Rajya Sabha Starred Question Meena, Scientist-B, ZSI/NRC, Dehradun, attended a Dy. No. 1453 on the topic habitat invasion of Gambusia meeting with Chief Controller of Accounts, MoEFCC, affinis on 29th January 2024; the comments of ZSI for Gol, New Delhi to discuss on ZSI Budget and Audit paras the First meeting of G20 Working Group on Environment held at Wildlife Institute of India, Dehradun on 06th and Climate Sustainability under the Brazilian G20 January 2024; Dr. Gaurav Sharma, in a meeting received Presidency on 29th and 30th January 2024 submitted "Certificate of Appreciation" from Dr. Durgesh Pant, the Ministry on 29th January 2024; reply provided to the Director General, UCOST, Government of Uttarakhand, administrative ministry for Rajya Sabha Starred Question

No. S1094 on the Wild Animals submitted to the Ministry on 30th April 2024.

- 3. Dr. Gopinathan Maheswaran, Scientist F, ZSI/HQ, Kolkata, attended a meeting at MoEFCC on NIRANTAR wherein many institutions submitted their proposals seeking funds from MOEFCC on 19th January, 2024.
- 4. Dr. S.D. Gurumayum, Scientist E, ZSI/APRC, Itanagar, attended the book release function organised by Arunachal Pradesh state Biodiversity board on City Biodiversity Index-Itanagar inaugurated by PCCF (HoFF), Govt. of Arunachal Pradesh; Hon'ble Mayor, Itanagar Municipal Corporation; Chairman, State Biodiversity board Itanagar and other dignitaries at IMC, Itanagar on 10th January 2024 and an online technical committee meeting of state biodiversity strategy and action plan (SBSAP) of Arunachal Pradesh on 19th January 2024 through hybrid mode.

### Survey of India

Zoological

Dehradun for ZSI contribution (in installing ZSI Fauna exhibition & participation/inputs in Scientific Sessions) in organizing "4th Dehradun International Science & Technology Festival-2023" held at Hotel Pacific, Dehradun on 06th January, 2024.

- Smt. J. Lyngdoh, Scientist E, ZSI/NERC, Shillong, attended the Governing Body of the Meghalaya Zoo implementing Society meeting on 22nd January 2024 at the O/o the PCCF, Meghalaya.
- Dr. S. Balakrishnan, Scientist E, ZSI/MARC, Digha, attended as Chief Guest for Inaugural function of the "3D film show under Return of the lost world" organised by Digha Science Centre, Ministry of Culture, Digha on 31st January 2024; as Chief Guest for Inaugural function of the "Nature Camp" organised by Digha Science Centre, Ministry of Culture, Digha and Howrah Vigyan Chetna Samannaya on 6th January 2024.
- 10. Dr. Basudev Tripathy, Scientist-E, ZSI/WRC, Pune, attended a discussion on horseshoe crab conservation organized by Youth4Water Plus, UNICEF Odisha through virtual mode on 16th January 2024; a meeting to discuss the issues related to sharing of biodiversity data of India with GBIF and MoL organized by Statistics Division, MoEFCC through virtual mode on 9th January 2024.
- 11. Dr. Basudev Tripathy, Scientist-E and Dr. S.S. Talmale, Scientist-C, ZSI/WRC, Pune, attended meeting with the DCF, Ballari for discussion on the wildlife conservation plan regarding ZSI-SMIORE-WMP project report at the Forest Department, Ballari, Karnataka on 2nd January 2024.
- 12. Dr Bineesh K.K, Scientist E, ZSI/MBRC, Chennai, attended a five-day international workshop on Delineating Important Shark and Ray Areas in Asia from

22nd to 26th January 2024 in Bali, Indonesia, organised by the IUCN Shark Specialist Group.

- 13. Dr. K. A. Subramanian, Scientist E, ZSI/SRC, Chennai, represented Zoological Survey of India in the first regional consultation workshop on National Biodiversity Strategy and Action Plan (NBSAP) organized by National Biodiversity Authority at National Academy of Legal Studies and Research (NALSAR), Hyderabad from 9-10th January, 2024.
- 14. Dr. Tamal Mondal, Scientist-D, ZSI, HQ, Kolkata, attended a Capacity Building Workshops on Roles and Responsibilities of Indian CITES Scientific Authorities on CITES Implementation organized by MoEFCC and ZSI at Taj City Centre, Kolkata on 8th January 2024; attended a National Workshop on Advances in Fish Systematics: Morphological and Molecular Approaches at ZSI/FBRC, Hyderabad on 18th and 19th January 2024.
- 15. Ms Debashree Dam, Scientist -C, ZSI, HQ, Kolkata, conducted the inaugural session and valedictory session of High End Workshop-Karyashala 2024 on taxonomy, ecology and conservation of Indian spiders on 3rd January and 9th January 2024 respectively at ZSI Kolkata; the inaugural session and valedictory session of the National workshop on advances in Fish systematics at Hyderabad on 18th and 19th January 2024; the valedictory program of the All India inter University Women's Football Tournament 2023-2024 on 13th January 2024 at Vidyasagar Univeristy, Midnapore, West Bengal; the Graduation day ceremony at Kongunadu Arts and Science at Coimbatore on 27th January 2024; the inaugural session of workshop on CITES hosted by ZSI and organised by MoEFCC at Kolkata on 8th January 2024.

#### TRAININGS ATTENDED

- T.K.S. Thatachari, Senior Zoological Assistant, ZSI/EBRC, Gopalpur-on-Sea, attended the National Workshop on Advances in Fish Systematics: Morphological and Molecular Approaches organized by Zoological Survey of India in association with National Bureau of Fish Genetic Resources (NBFGR) on 18th and 19th January 2023.
   Shri Sandeep Kumar, Senior Zoological Assistant, ZSI/ WRC, Pune attended two days National Workshop on "Advances in Fish Systematics: Morphological and Molecular Approaches" organized by the ZSI/FBRC, Hyderabad from 18th to 19th January 2024.
   Dr. P.S. Bhatnagar, Scientist-E, ZSI/CZRC, Jabalpur,
- Dr. B. Sinha, Scientist E, Shri. B. Saikia, Assistant Zoologist and Shri. P. N. Konwar, Senior Zoological Assistant, ZSI/NERC, Shillong, attended one day workshop on Application of NGCM data and NGDR portal organized by Geological Survey of India, North Eastern Region, Shillong on 17th January 2024.
- Shri. R. Goswami, Senior zoological Assistant, ZSI/NERC, Shillong, attended a High-End Workshop on "Taxonomy, Ecology and Conservation of Indian Spiders" sponsored by SERB., DST, Govt. of India under the Accelerate Vigyan Scheme from 3rd to 9th January 2024.
   Dr. Sanjay Paunikar, Scientist-E & Dr. Sandeep Kushwaha, Scientist-C, ZSI/CZRC, Jabalpur, attended a short term course on museum maintenance and digitization from 9th January to 13th January 2024 organized by Department of Zoology and Biotechnology Government Home Science College Jabalpur Madhya Pradesh.
- 4. Shri. Amal S., Senior Zoological Assistant, ZSI/WGRC, Kozhikode participated in a Hands-on training on Trichotaxonomy conducted by ZSI, HQ, Kolkata from 10th to 11th January 2024.
- Smt. Jwala R., SRF, ZSI/WGRC, Kozhikode attended a High-End Workshop on "Taxonomy, Ecology and Conservation of Indian Spiders" sponsored by SERB., DST, Govt. of India under the Accelerate Vigyan Scheme from 3rd to 9th January 2024.

#### LECTURES DELIVERED

- Dr. S.D. Gurumayum, Scientist E and Dr. Temjenmongla, Scientist – D of ZSI/APRC, Itanagar, attended and delivered a talk on "Fauna of Arunachal Pradesh and Fish Taxonomy" and "Impact of millipedes towards conservation of the environment" respectively during the Forestry Internship Training & Education Programme, at SFRI, Chimpu, Itanagar, Arunachal Pradesh on 17th January 2024.
   Dr. Archana Bahuguna, Scientist-E, ZSI/NRC, Dehradun, delivered lecture on Trichotaxonomy to 25 participants in the Training programme organized by ZSI, Hqs., Kolkata on 10th and 11th January, 2024.
   Dr. P.C. Pathania, Scientist-E, ZSI/HARC, Solan, delivered an Invited talk- for the participant of ICAR winter school on Agroforestry: An potential approach to mitigate
- the Forestry Internship Training & Education Programme, at SFRI, Chimpu, Itanagar, Arunachal Pradesh on 17th January 2024.
  Dr. Anil Mohapatra, Scientist E, ZSI/EBRC, Goaplpuron-Sea, delivered a lecture on "Advances in Anguilliform research in India" in the National Workshop on Advances in Fish Systematics: Morphological and Molecular Approaches organized by Zoological Survey of India in association with National Bureau of Fish Genetic Resources (NBFGR) on 19th January 2024.
  Dr. P.C. Pathania, Scientist-E, ZSI/HARC, Solan, delivered an Invited talk- for the participant of ICAR winter school on Agroforestry: An potential approach to mitigate climate change being organized by Director of Research, University of Horticulture & Forestry, Nauni, Solan, H.P on 22nd January 2024 and conducted Ph.D. (Entomology) student oral comprehensive viva-voce examination of Department of Entomology, College of Horticulture, University of Horticulture & Forestry, Nauni, Solan, H.P was conducted on 22nd January 2024.

#### TRAININGS ORGANIZED

1. A National workshop was organized by FBRC, Hyderabad on "Advances in Fish Systematics: Morphological & Molecular Approaches" on 18th & 19th January 2024.

2. A Karyashala (High-End Workshop) on 'Taxonomy, Ecology and Conservation of Indian Spiders' was organized by the Arachnida Section, Zoological Survey of India, Kolkata, from 3rd to 9th January 2024 for P.G/Ph.D. students. The workshop was sponsored by Science & Engineering Research Board (SERB), Department of Science and Technology, Govt. of India under the Accelerate Vigyan Scheme.

- 3. A one-day training program was conducted by MARC, Digha for the students of Howrah Vigyan Chetna Samannaya, Howarh at MARC, ZSI, Digha on 07.01.2024.
- 4. A hands-on training was organized by ZSI, HQ on "Trichotaxonomy" from 10th to 11th January 2024.
- 5. A one day seminar entitled "Mangroves associated Fauna from Sundarban" organized on 5th January 2024 and one day seminar entitled "Sundarban Mangroves" organized on 26th January 2024 by Sunderban Regional Centre, Canning.



 Dr. P.S. Bhatnagar, Scientist-E, ZSI/CZRC, Jabalpur, attended a one day Workshop on Application of NGCM data and data available at NGDR Portal on 30th January 2024 organised by Geological Survey of India, Jabalpur, Madhya Pradesh.

- 9. Dr. Shelley Acharya, Scientist E, ZSI, HQ, Kolkata, participated in the Capacity Building workshop on CITES Implementation at the Taj Hotel, New town on 08th January, 2024.
- Dr. Atanu Naskar, Scientist C, ZSI, HQ, Kolkata have attended the National Workshop on "Advances in Fish Systematics: Morphological and Molecular Approaches" organized jointly by ZSI & ICAR-NBFGR in Hyderabad on 18th and 19th January, 2024.

5. A lecture titled 'Field Identification of Sharks and Rays of



India' was delivered by Dr. Bineesh K.K, Scientist – E, ZSI/ MBRC, Chennai, at the national workshop on Advances on Fish Systematics: Morphological and Molecular Approaches held at Hyderabad from 19th January 2024.

- 6. Dr. Sanjay Paunikar, Scientist-E, ZSI/CZRC, Jabalpur, delivered Lecture on "Moths: Collection, Preservation and Identification" at Government M. H. Home Science College, Jabalpur on 9th January 2024.
- 7. Dr. Souvik Sen, Scientist- D, ZSI, HQ, Kolkata delivered lectures on "General morphology and basic identification guide of spiders" and "Conservation Status of Indian Tarantulas in IUCN, the Wild Life (Protection) Amendment Act. 2022 and CITES" for the PG and PhD students in a SERB-DST sponsored Karyashala (High-End Workshop) on 'Taxonomy, Ecology and Conservation of Indian Spiders' on 3rd and 4th January 2024 organised by ZSI, Kolkata.
- 8. Dr. N. Marimuthu, Scientist E, ZSI, Kolkata, has given an invited talk entitled, "Methods, validation limits and pre-requisites on Coral reef habitat assessment and their Restoration processes" at Marine Biology Research Symposium 2024, organised by Centre for Climate Change Studies, Sathyabama Institute of Science and Technology on 24th 2024.
- 9. Dr. Sandeep Kushwaha, Scientist-C, ZSI/CZRC, Jabalpur, delivered a lecture on "Economic importance of Insects on 9/1/24 at " A short term course on museum maintenance and digitization from 9th January to 13th January 2024 organized Department of Zoology and biotechnology Government Home Science College Jabalpur Madhya Pradesh.

### OBITUARY

#### Dr. Mohammad Shamim Jairajpuri

(8th April 1942-10th January 2024)

With profound grief, we inform the departure of our former Director, (Director of Zoological Survey of India from 1989-91) Dr. Mohammad Shamim Jairajpuri on 10th January 2024. Dr. Jairajpuri was the Professor from Aligarh University, Ph.D (1964), obtained D.Sc (1970) for his outstanding work on Nematology, particularly on Taxonomy. He served as a professor and Chairman of the Zoology Department (1988–89 and 1997-1998) and Dean of the Faculty of Life Sciences (1993-95 & 1997-98) at Aligarh Muslim University Aligarh. Prof. Jairajpuri has done pioneering research on plant and soil nematodes for which the Zoological Society of India awarded him with gold medal in 1997 and 1998. He has published over 20 Books and Monographs, over 350 research papers and contributed numerous book chapters and general articles in reputed Journals of the world. He has the distinction of publishing over 80 research papers in Nematologica (The Netherlands) and over 40 papers in Revue de Nematologie (France), the two topmost international journals in the subject of Nematology. He has guided 28 students in their Ph.D and equal number in M.Phil degrees. He was the Principal Nematologist to the Commonwealth Agricultural Bureaux International, United Kingdom from 1981-83. In December, 1999 the Ministry of Environment & Forests chose him to be the first recipient of the Janaki Ammal National Award in Taxonomy for his work in the field of Nematology. In March 2000, the Third

World Academy of Sciences, Trieste, Italy has elected Prof. M. Shamim Jairajpuri as a fellow. He is the Fellow of all Science Academies of the country. In the same year he also got elected as President of the Indian Society for Parasitology (ISP). He was the former and first Vice Chancellor of Maulana Azad National Urdu University (MANUU), Hyderabad with a long list of awards (Shiksha Ratna Puruskar, 2007, by India International Friendship Society, Lifetime Achievement Award in Parasitology, Indian Society for Parasitology) and recognitions in the country and abroad.

We lost an eminent scientist, an able administrator and one of the best Nematologist in the world. The fraternity of Zoological Survey of India pay homage to the departed soul.

# PHOTO





hands-on training to PG/Ph.D. students on general identification of spiders and create basic awareness on this fascinating creature. This is an attempt to groom potential PG and Ph.D. level students by developing dedicated research skills in spider taxonomy through this high-end workshop i.e. 'KARYASHALA'. A total of 24 participants across India attended the week-long high-end workshop.







A special program on the New Year 2024 was held at ZSI HQ premises on 1st January 2024. Dr. Dhriti Banerjee, Director, ZSI is among the top 100 Women Achievers in India listed by the prestigious Magazine of India Today for leading the way in the fields of Science. Addressing all the scientists, administrative staff and research scholar of ZSI Hqs and Regional Centres, Director congratulated everyone and shared her experience and expressed gratitude on being in a List of Top 100 women achievers in India in 2023.





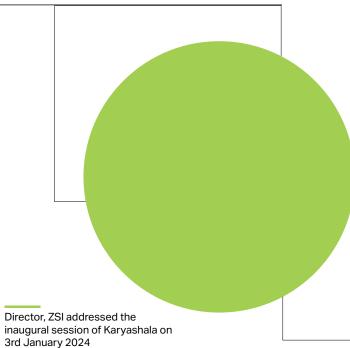
Director, ZSI on 5th January, 2024, attended a Panel Discussion as an esteemed panelist in a three-days' workshop on 'Basics on Plant Identification and Nomenclature' for the Indian Forest Service officers organised by Botanical Survey of India, Kolkata nominated by the MoEF&CC from the 3rd -5th of January 2024 at BSI, Kolkata.



Director, ZSI Inaugurated the Acharya Prafulla Chandra Roy Smarak Vigyan 'Mela O Pradarshni' on 5th January 2024 organised by West Bengal University of Animal and Fishery sciences (WBUAFS) at University Campus, Belgachia, Kolkata.



#### ZSI E-News









A one-day Capacity Building Workshop on Roles and responsibilities of Indian CITES Scientific Authorities on CITES Implementation was organised by MoEFCC on 8th January 2024, in Kolkata. The ZSI under the direction of Dr. Dhriti Banerjee proposed and organised the workshop supporting the Wildlife Division, MoEFCC involving CITES Scientific Authorities.



Director, ZSI addressed the two-day Hands-on Training on Tricho-Taxonomy & Extension on 10th January 2024 organised by Training & Extension Division at ZSI HQs, Kolkata.







Director, ZSI as Chief Guest, graced the valedictory ceremony of the All India Inter-University Women's Football Tournament 2023-2024 on 13th January 2024, at Kshudiram Krirangan of Vidyasagar University

**GOVERNMENT OF INDIA** OF ENVIRONMENT, FOREST AND CLIMATE CHANGE











Director, ZSI along with ZSI scientists, staff and research scholars paid tributes to Netaji Subhas Chandra Bose on his 127th birth anniversary observed as Parakram Diwas on 23.01.2024.





ZSI celebrated 75th Republic Day with a colourful parade Addressing the programme, Director launched the Animal Taxonomy Summit (ATS) 2024 website which will be organised on the commemorating 109th Foundation Day of ZSI on 1st July, 2024. On this occasion, the book "Monograph of Indian Cryptophagidae (Coleoptera Cucujoidea)" by Tanuja Samal was released and its copies were presented to the director and scientists.