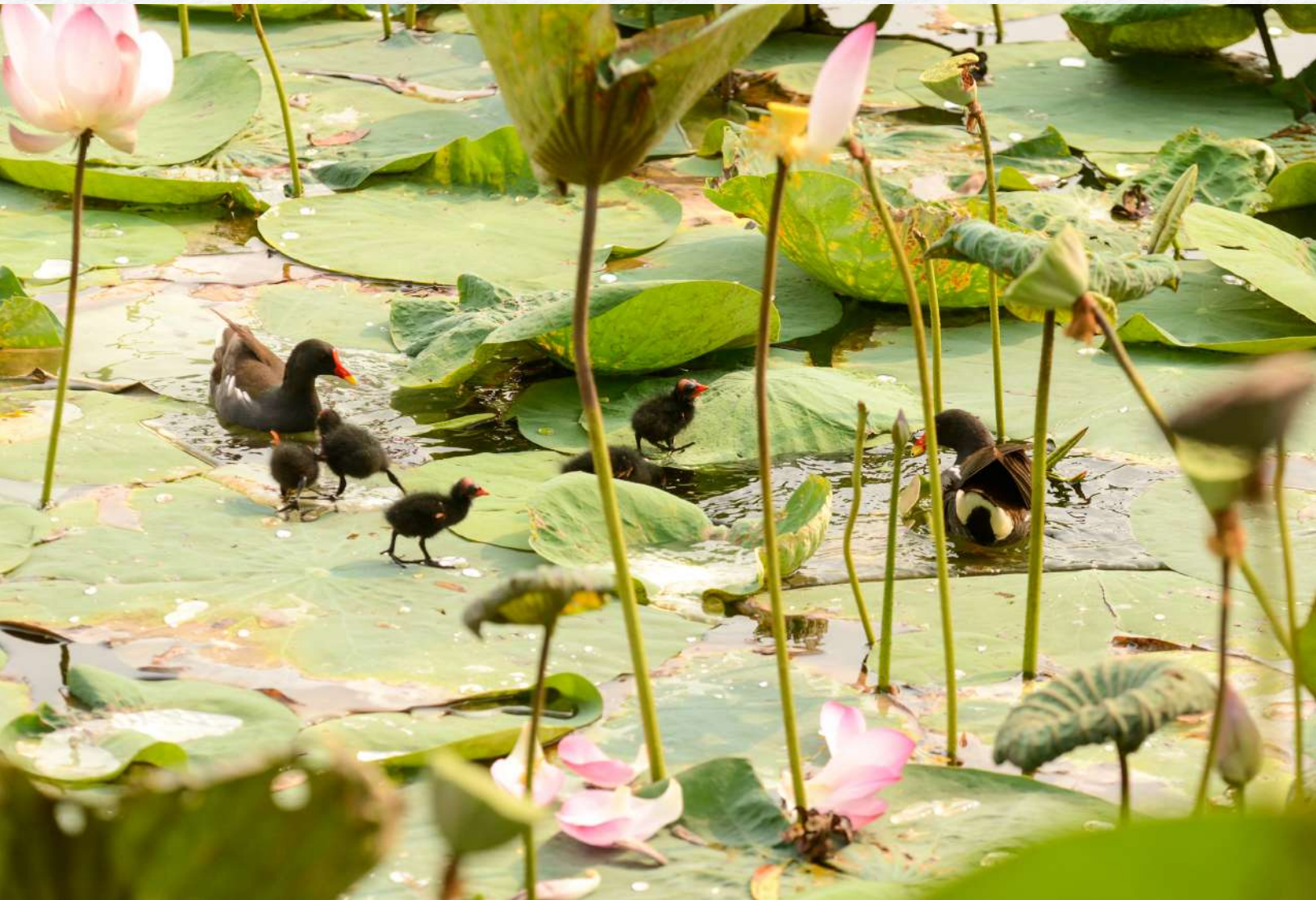


ZSI E-News

Vol. 64 | May 2024 | Monthly E-Newsletter from Zoological Survey of India





from the Director's Desk

Dear Colleagues and Esteemed Readers,

I am pleased to inform you about the successful release of the May 2024 issue of the monthly ENEWS from the Zoological Survey of India (ZSI), which highlights the most recent accomplishments, developments, and findings in the realms of research and fauna exploration. Within these electronic pages, you will be taken on a captivating voyage into the realms of science and exploration, with each piece serving as evidence of taxonomic advancement, conservation initiatives, and innovative approaches to preserve biodiversity. Our ZSI E-NEWS aims to bridge the gap between our scientific

community and the general public by providing valuable information about our ongoing research and its outcomes. With each edition, we offer a window into the dynamic and diverse field of zoology, highlighting the vital efforts undertaken by ZSI to study and protect India's abundant and distinctive wildlife.

Director, ZSI along with officials made a comprehensive discussion on Cetaceans study for the proposed Versova-Bandra Sea Link (VBSL) at VBSL Project Office in Mumbai. Director, ZSI, along with officials attended a meeting with Additional Chief Secretary, Tamil Nadu to discuss various issues related to the development of Zoological Survey of India. Director, ZSI, attended a scheduled meeting at the Natural History Museum (NHM) in London on 20th May 2024 with Dr. Tim Littlewood (Executive Director of Science), Dr. John Jackson (Head of Science Policy and Communication), Dr. Roberto Portela Miguez (Senior Curator in Charge, Mammals), Dr. Patrick Campbell (Senior Curator, Reptiles), Dr. Tom White (Senior Curator, Non-Insect Invertebrates), Dr. Ranee Om Prakash (Senior Curator-Flowering Plants), Isabel Davis (Research Theme Leader, Collections and Culture), Ms. Helen Robertson (Head of Postgraduate Studies, NHM) and Dr. Jesus Hernandez to discuss ongoing projects, potential collaborations, and recent advancements in the field of natural history and museum curation and the potential of ZSI working with NHM on digitizing the faunal collection in ZSI and in NHM in order to bring out the complete virtual fauna of India. ZSI provided the inputs on the Ministry for Ocean and Climate Change Dialogue 2024 related to two topics of the dialogue scheduled to be held from 11–12 June 2024 in conjunction with the Subsidiary Body session to be held in Bonn, Germany from 3–13 June 2024. In this month, ZSI researchers have successfully identified a total of 1514 species of faunal communities, encompassing 12 new species with one species of Eel, one species of Pseudoscorpion, two species of hemiptera and eight species of lepidoptera. Notably, seven Lepidoptera species have been newly recorded as distributed in India. Additionally, a sum of 52 DNA Barcodes has been generated throughout this month.

I would like to express my sincere appreciation to all those who contributed to the success of this publication and research accomplishments. I also extend special thanks to our readers for your unwavering support and interest in our endeavors. Your involvement inspires us to strive for excellence and innovation in fulfilling our mission. As we move forward, we remain dedicated to advancing our scientific knowledge and fostering a deeper reverence for the natural world. I urge every one of you to continue sharing your feedback and ideas, as they are crucial in shaping the future of our ENEWS and ensuring its significance and impact.

Once again, I extend my gratitude for your unwavering support. Let us continue our journey together, exploring, uncovering, and safeguarding the wonders of our natural heritage.

Jai Hind,

Dr. Dhriti Banerjee

Director
5th June 2024
Kolkata

Cover: Common Moorhen, *Gallinula chloropus* (Linnaeus 1758) with chicks. Courtesy: HQ., Kolkata

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HEADQUARTERS, KOLKATA

A total of 743 species of faunal communities belonging to Arachnida, Apterygota, Chalcididae, Diptera, Formicidae, Hemiptera, Orthoptera, Lepidoptera, Mollusca, Acanthocephala, Nematoda, Platyhelminthes, Porifera, Cnidaria, Annelida and Echinodermata were identified during the month. 8 species of Lepidoptera and 2 species of Hemiptera were described as New to Science and 1 species of Mollusca and 7 species of Lepidoptera were recorded as new to Indian fauna during the month. 2 species of Hemiptera, 38 species of Lepidoptera, 5 species of Nematode, and 3 species of Platyhelminthes were augmented to National Zoological Collections. Identification & Advisory services were rendered

to Gulf of Mannar Biosphere Reserve Centre for Marine Biodiversity, Department of Aquatic Biology and Fisheries, Manipur University, Department of Zoology, University of Calcutta, Department of Zoology, Diamond Harbour Women's University and Department of Biomedical Engineering, Netaji Subhas Engineering College, Bhavnagar University, Gujarat, Aligarh Muslim University, Laxmi Organics, Chhattisgarh and KVK Kargil-1 (SKUAST). Training on the Taxonomy of Collembola was imparted to PG students of CSJMU, Kanpur, and on Collection, preservation, and identification of Platyhelminthes parasites to PG students of Chhatrapati Shahuji Maharaj University, Kanpur.

NORTH EASTERN REGIONAL CENTRE, SHILLONG, MEGHALAYA

A total of 57 species of faunal communities belonging to Orthoptera, Odonata, Araneae, Hemiptera, Lepidoptera, Crustacea Mollusca, Pisces, Reptilia, and Amphibia were identified. Identification and advisory services were rendered to the Wildlife Trust of India and Royal Bhutan University. A MoU was signed between the ZSI and the Natural History Museum of Geneva for collaboration on mammalian taxonomic research. International Day for Biological Diversity was celebrated on 22nd May 2024 with the students of St. Peter's School, Shillong. A plantation drive was conducted on the campus of the North Eastern Institute of Ayurveda and Homeopathy, Shillong, Meghalaya. Visitors from Osmania University, Guwahati College, and Pragjyotish College visited the centre during the month.



Students of Pragjyotish College



Visit of Students of Guwahati College



Plantation drive on World Environment Day



Celebration of International Biodiversity Day

CENTRAL ZONE REGIONAL CENTRE, JABALPUR, MADHYA PRADESH

A total of 64 species of faunal communities belonging to Coleoptera, Lepidoptera, Hemiptera, and Mollusca were identified. Identification and advisory services were rendered to Jawaharlal Nehru Krishi Vishavidyala, Jabalpur. Dr. Sandeep Kushwaha, Scientist-C was awarded a patent on a Portable Motorized Chemical Sprayer. Birth Anniversary of renowned Hindi poet Late. Sh. Sumitra Nandan 'Panth' was celebrated on 20th May 2024 as a part of promoting Rajbhasha Programme Hindi, the officers, and staff spread light on his life journey and recited a few of his poems, International Museum Day-2024 under the theme "Museums for Education and Research" was celebrated on 17th May 2024, International day for biodiversity on the theme "Be part of the plan" was celebrated on 22nd May 2024 and as a part of World Environment Day-2025 campaign, Officers and Staff of ZSI, CZRC performed tree plantation drives in the group at various places of Jabalpur and also people at various public places were also made aware about the theme of the WED-2025.



Training programme on "Collection, Preservation and Identification of Insects" organized jointly by CZRC, Jabalpur and JNKVV Jabalpur.

International Biodiversity Day celebration at CZRC, Jabalpur



DESERT REGIONAL CENTRE, JODHPUR, RAJASTHAN

A total of 60 species of faunal communities belonging to Insecta, Gastropoda, and Pisces were identified. Identification and advisory services were rendered to JNV University Jodhpur (Rajasthan) and BGSB University Rajouri (J&K). “International Day for Biological Diversity” was celebrated with the theme “Be part of the Plan” on 22nd May 2024 at the Centre. The Chief Guest Dr. N.S. Rathore, among the 25 students, delivered a lecture on “Faunal diversity of and Conservation in Reptiles of Rajasthan” and the plantation of saplings was done on the campus of the Centre. Paryavaran Divas 2024 was celebrated and plant saplings were distributed to the officers and staff members of the Centre on 27th May 2024 under the Celebration of World Environment Day from 27th May to 5th June 2024. Various activities like an Essay writing competition were also held on 28th May 2024 among the students of two schools. Plantation was done at Shri Purbariya Hostel, Jodhpur on 30th May 2024 by all officials during the World Environment Day programmes celebration.

International Day for Biodiversity (IDB) with the theme “Be part of the Plan” celebrated at DRC, Jodhpur on 22nd May, 2024



Plantation and Essay competition organized at DRC, Jodhpur under Celebration of World Environment Day on 27th and 28th May, 2024

NORTHERN REGIONAL CENTRE, DEHRADUN, UTTARAKHAND

A total of 78 species of faunal communities belonging to Phthiraptera, Orthoptera, Lepidoptera, Odonata, Pisces, Amphibia, and Reptilia were identified. The centre conducted “MISSION LIFE activities an initiative of MoEFCC, Gol” by planting a sapling, maintaining, cleanliness, and protecting of plantation with iron-fenced tree guards in the main Kaulagarh Road, Dehradun on 1st May 2024; Cleanliness Drive & Protection Wire on Boundary Wall of ZSI, NRC Campus, Dehradun on 7th and 8th May 2024; taken Pledge, Sapling Plantation and awareness campaign to Save Water and Cleanliness with villagers at Dhanoulti Forest and around, Uttarakhand on 13th May 2024 and with School Students & Faculty of “Lions Bal Vidya Mandir Sr. Sec. School, Pilibhit, Uttar Pradesh” on 16th May 2024 and provided information on Save Biodiversity to celebrate International Day for Biological Diversity, Save Water, Save Energy and Cleanliness to Faculty and students of four schools of Dehradun programme organized jointly in collaboration with Uttarakhand State Education Research Centre, Government of Uttarakhand at the centre on 22nd May, 2024. The Centre also conducted a Special Campaign 3.0 swachhta/cleanliness awareness drive in and around the office campus and at Kaulagarh Market, Dehradun on various dates of May 2024.



Snow covered mountains at Kedarnath Wildlife Sanctuary, Uttarakhand



Royle's Pika,
Ochotona roylei
Ogilby, 1839



Celebration of International Day for Biodiversity
at ZSI, NRC, Dehradun



Mission Life activities conducted
at ZSI, NRC, Dehradun

SOUTHERN REGIONAL CENTRE, CHENNAI, TAMIL NADU

A total of 204 species of faunal communities belonging to Ephemeroptera, Hemiptera, Lepidoptera, Odonata, Psocoptera, Mollusca, Fishes, Amphibia, Aves, Reptilia, and Zooplankton were identified. This centre conducted an awareness and internship programme for postgraduate students of Zoology from various colleges under Madras University, Chennai, from May 16th to 31st May 2024. One new genus and species of fossil Psuedoscorpion (Geogarypidae: *Geogaranya valiyaensis*) was recorded as new to science. One species of damselfly was augmented to the National Zoological Collections.



Black Ibis



Eurasian Spoonbill

GANGETIC PLAINS REGIONAL CENTRE, PATNA, BIHAR

A one-day local survey of Baraila Lake, Vaishali was conducted. A total of 45 species of faunal communities belonging to Insecta, Mollusca, and Pisces were identified. Identification and Advisory services were rendered to the Department of Entomology at Nagaland University. A cleanliness mission in an awareness programme on Rural Water conservation with fishermen and farmers residing near Baraila Lake at Loma, Vaishali on 3rd and 6th May 2024 respectively.



A flock of Asian Openbill (*Anastomus oscitans*) at Baraila wetlands



Environment and wildlife awareness programme organised at Baraila wetlands

HIGH ALTITUDE REGIONAL CENTRE, SOLAN, HIMACHAL PRADESH

A total of 48 species of faunal communities belonging to Insecta and Pisces were identified. Identification & Advisory services were rendered to Shoolini University and Post Graduate Govt College, Chandigarh. Under Mission LiFE, a mass awareness programme was organized, 45 students and 03 teachers of South-vale School visited the Centre. Mr. Karmannye Chaudhary, a second-year biology student with a bachelor's degree at Queen Mary University of London visited the Museum on 21st May 2024 and consulted Coleoptera collections.



Hindi Workshop organised at ZSI, SOLAN on 3rd May 2024



Scientists of centre explaining to students about rare and endemic fauna of Himalaya



Students of South Vale school visited the Himalayan Museum at ZSI, Solan on 3rd May 2024

MARINE BIOLOGY REGIONAL CENTRE, CHENNAI, TAMIL NADU

A survey was carried out in Kavaratti Atoll, Lakshadweep. Three surveys were undertaken at the Kasimedu fish landing centre. A total of 47 species of faunal communities belonging to Porifera, Arthropoda, Mollusca, and Pisces were identified. Identification and advisory services were rendered to the Officer of the Judicial Magistrate, Thoothukudi, and Government Arts College, Vyasarpadi, Tamil Nadu.



Stegastes nigricans (Lacepède, 1802)



Bleached corals

ANDAMAN AND NICOBAR REGIONAL CENTRE, PORT BLAIR, ANDAMAN AND NICOBAR ISLANDS

One long-term survey was conducted in Great Nicobar Island and local field surveys were conducted in Burmanallah, Kodiyaghat, Sippighat, Chidiyatapu, Nayashahar, Garacharma, Ograbraj, Ferrargunj, South. A total of 130 species of faunal communities belonging to Coleoptera, Lepidoptera, Odonata, Hemiptera, Mollusca, Pisces, and Aves were identified. World Environment Day was celebrated and various programmes such as the Drawing Competition distributed seedlings to local public & schools in collaboration with the Department of Environment & Forests. An exhibition on the faunal diversity of the A & N Islands was organized through LED displays, pamphlets, and brochures from 28th to 31st May 2024. One-day seminar on World Environment Day 2024 conducted on 31st May 2024 (Online).



Didemnum molle (Herdman, 1886)



Stylissa massa Hallmann, 1914

SUNDERBAN REGIONAL CENTRE, CANNING, WEST BENGAL

One day local Survey was undertaken in Sunderbans in Godkhali, Gosaba, Pakhiralay, and Dabu. A total of 49 species of faunal communities belonging to Crustacea, Mollusca, and Pisces were identified.

Two outreach activities were organized at Pratibha Coaching Centre and Gurukul Coaching Centre and saplings were distributed to the school students and teachers and saplings planted in Amjhara Village, Hedia, Canning.



Anemone Commensal Shrimp, *Periclimenes sp.*



Hydnophora sp.



World Environment Day: Sapling distribution

FRESHWATER BIOLOGY REGIONAL CENTRE, HYDERABAD, TELANGANA

A total of 73 species of faunal communities belonging to Hemiptera, Branchiopods, Ostracods, Mollusca, Pisces, and Reptiles were identified. The centre received the Biodiversity Conserver Award 2024 from Andhra Pradesh Biodiversity Board. International Day for Biodiversity on 22nd May 2024 at Andhra University, Visakhapatnam. A Book titled "Threatened Fauna of Andhra Pradesh" was launched on the occasion of Biodiversity Conservation Day at Andhra University. A stall was set up at Andhra University on International Day for Biodiversity, 22nd May 2024 to generate awareness regarding the conservation of fauna. Mission LiFE and Swachhta Hi Seva Special Campaigns 3.0 were conducted to generate awareness among people.



Anser indicus (Latham, 1790)
(Bar-headed goose)



Rynchops albicollis Swainson, 1838 (Indian skimmer)



Biodiversity Conserver award received by FBRC

WESTERN GHAT REGIONAL CENTRE, KOZHIKODE, KERALA

One local survey was conducted in Kakkavayal, Kozhikode, Kerala. A total of 73 species of faunal communities belonging to Testate amoebae, Coleoptera, Scolopendromorpha, Dermaptera, Hemiptera, Decapoda, Hymenoptera and Mantodea were identified. Identification and Advisory services were rendered to Brennen College, Kannur University, Thalassery. The centre initiated the celebration of World Environment Day. As part of the celebration, competitions like Quiz, Essay, Elocution, etc. were conducted for school and college students. A Mobile Photography competition is also conducted for all Indian citizens to create awareness among the general public.



Certificate Distribution during WED events



Jute bag distribution during WED events



Internship Students at ZSI-WGRC, Kozhikode

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

Local surveys of Bahuda estuary and Gopalpur coast. A total of 150 species of different faunal groups were identified. *Ariosoma thoothukudiense* Kodeeswaran, Kathirvelpandian, Mohapatra, and Kumar, 2024 is described from the Tamil Nadu coast in collaboration with NBFGR- ICAR. Two DNA barcodes belonging to one species were uploaded to the NCBI data base. A large hammer-headed shark, *Sphyrna lewini* (Griffith & Smith, 1834) of 104 kg was recorded in the catch at Gopalpur.

Bengal fox *Vulpes bengalensis* (Shaw, 1800) at Rushikulya estuary



Lesser whistling duck *Dendrocygna javanica* (Horsfield, 1821) at Bahuda estuary

ARUNACHAL PRADESH REGIONAL CENTRE, ITANAGAR, ARUNACHAL PRADESH

A total of 68 species of faunal communities belonging to Lepidoptera, Orthoptera, Hemiptera, Mollusca, Pisces, and Amphibia were identified. An advisory service was rendered to Patkai Christian college, Nagaland University, and Himalayan University. The Centre has submitted a Project proposal in NMHS small grants 2024 on "Population Status of Musk deer and Mishmi takin in Arunachal Pradesh".



Minervarya pierrie (Dubois, 1975)



Zhangixalus suffry (Bordoloi, Bortamuli & Ohler, 2007)

MARINE AQUARIUM AND REGIONAL CENTRE, DIGHA, WEST BENGAL

The local survey was conducted at Champa and Mohana. A total of 87 species of faunal communities belonging to Polychaete, Mollusca, Nematoda, and Crustacea were identified. Visitors from institutions of Assam, West Bengal, Odisha, and Maharashtra visited the Marine Aquarium and museum for the month as part of an educational tour.



Littoraria melanostoma (Gray, 1839)



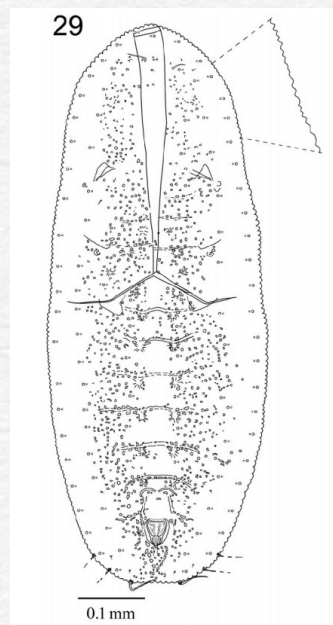
Boleophthalmus boddarti (Pallas, 1770)

NEW DISCOVERIES

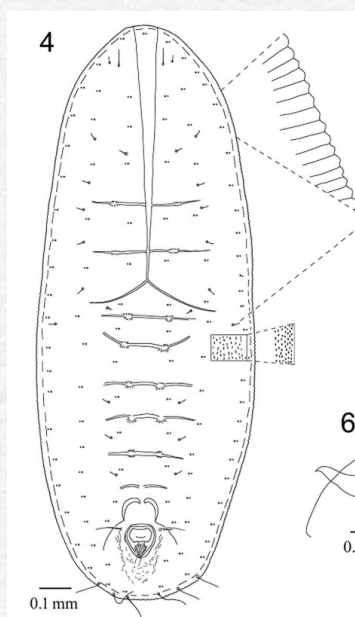
NEW SPECIES



Geogaranya valiyaensis Agnihotri et al., 2024



Cerafilum saddlense Dubey, 2024



Cerafilum ochlandrae
Dubey, 2024

PUBLICATIONS

BOOKS

- » Bhatnagar, P.S. and Kushwaha, S. 2024. Sodh Sar Pustika “Paryavaran avam Sanrakchan” pp 1-64. Rathore Academic Research Publications, New Delhi.

PAPERS

- » Ahmed, S., Julka, J.M., Banerjee, D. and Marimuthu, N. 2024. Spatial distribution of earthworm community structure along the wildlife sanctuaries of West Bengal, with a glimpse of parthenogenesis in *Metaphire houlleti* (Perrier, 1872). *Frontiers in Ecology and Evolution*, 10.3389/fevo.2024.1372706.
- » Bahuguna A., Areendran, G., Abhijitha, C. S. and Nair, A. 2024. Distribution and habitat suitability of species *Altiphylax stoliczkai* (Steindachner), Baltistan geckos or Karakorum geckos of Ladakh. *International Journal of Global Science Research*, 11(1): 2288-2304.
- » Behera, R.K., Mohanty, S.R., Acharya, S., Mohapatra, S.K., Mishra, S.S., Bineesh, K.K., Mohapatra A. 2024. On the identity of a rare morphologically abnormal butterfly ray from the east coast of India resolved through molecular tool. *Thalassas: An International Journal of Marine Sciences*, <https://doi.org/10.1007/s41208-024-00717-y>
- » Bharath. B., Dinesh, K. P., Karuthapandi, M., Kunte, K. B., Shabnam, A., Jaiswal, D. and Jadhav, S.S. 2024. New distributional record of Sri Lankan wet land species *Hylarana gracilis* (Gravenhorst, 1829) (Anura: Ranidae) from the Eastern Ghats, India. *Zootaxa*, 5453(1): 129-134.
- » Bhattacharya, U., Ghosh, A. and Rizvi, A.N. 2024. First report on fish-borne zoonotic cestode larvae of *Dibothrio cephalus* Lühe, 1899 in freshwater fish, *Oreochromis niloticus* (Linnaeus, 1758), from the Hemavati River, Karnataka (India). *International Journal of Zoology and Applied Biosciences*, 9(3): 24-28.
- » Dubey, A. K. 2024. Description of a new whitefly genus and two new species (Hemiptera: Aleyrodidae) from the Western Ghats and Andaman Islands, India. *Zootaxa*, 5453(2): 271–281.
- » Dutta, R., Kumar, V., Sharief, A., Singh, H., Bhatt, P., Joshi, R., Joshi, B.D., Thakur, M., Sharma, L.K. and Babu, R. 2024. Ecological Niche Overlap between Himalayan Ibex and Livestock in the Jispa Valley of Trans Himalayan Landscape, Himachal Pradesh, India. *Indian Journal of Ecology*, 51(2): 477-483.
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- » Jana, D., Hazra, A.K., Mazumdar, A. and Mandal, G.P. 2024. An updated checklist of Indian silverfish fauna (Insecta: Zygentoma). *Oriental Insects*, 1-13.
- » Jayasree, T. 2024. First report of the high altitude Cladoceran species *Streblocerus serricaudatus* (Fischer, 1849) s.lat. from the Western Ghats of India, Tamil Nadu. *International Journal of Fisheries and Aquatic Studies*, 12(2): 143-146.
- » Jayasree, T., Ranjana, B., Praveen K., Neethu, K.P., and Revathy, V. 2024. A Study on Diversity of Butterflies in Sathyamangalam Tiger Reserve, Erode District, Tamil Nadu, India: Based on a Faunistic Survey Tour. *International Journal of Current Research*, 16(4): 27952-27962.
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- important synanthropic flesh flies (Diptera: Sarcophagidae) from Eastern India. *Oriental Insects*, 58(4): 1-21.
- » Kashmeera, N.A. and Sudhikumar, A.V. 2024. Dominance structure and constancy of spiders in the Indian Thar desert. *The Journal of Basic and Applied Zoology*, 85: 1- 14.
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 - » Yogesh Kumar J. S., Sen, A. and Raghunathan C. 2024. Note on some newly recorded fish from Andhra Pradesh Coast, India. *Journal of Fisheries*, 12(1): 121204.

BOOK CHAPTERS

- » Ali, T., Hussain, Z., Majeed, A., Raina, R.H. and Parey, S.H. 2024. Recent Advances in Entomological Research Toward Agriculture and Human Health. In: Hajam, Y.A., Parey, S.H. and Bhat, R.A. (Eds.), *Insect Diversity and Ecosystem Services: Environmental Indicators, Molecular Approaches and Management Strategies*, 2:197-214.
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- » Sharma, I., Choudhary, P. and Raina, R.H. 2024. *Importance of Taxonomy in Biological Research* for Insect Diversity and Ecosystem Services by Apple Academic Press (AAP) a group of CRC Press, Taylor & Francis, 1:29-38.

POPULAR ARTICLE

- » Saikia, U. 2024 “International Day for Biological Diversity: a day for realization” was published in 19th May edition of Shillong Times.

MEETINGS ATTENDED

- » Dr. Dhriti Banerjee, Scientist – G & Director, Zoological Survey of India, released ZSI-EIACP Newsletter (2023-24) at ZSI, HQ, Kolkata under the Chairmanship of Dr. K. Venkataraman, Former Director, ZSI and the External Member Dr. Urmi Chatterji, Professor, Calcutta University in ZSI Annual Progress Monitoring Meeting of Senior

Officers of HQ and Regional Centres; attended Alumni of Mahadevi Birla World Academy as a chief Guest on 4th May 2024; met with Mr. Ravi Singh, Secretary general & CEO, WWF-India and Mr. Stuart Chapman, Leader, Tigers Alive Initiative to talk about effective and collaborative efforts for tiger and several projects like Project Tiger, Project Cheetah, International Big Cat Alliance (IBCA) on 4th May 2024, paid tribute to the Nobel laureate Rabindranath Tagore on the occasion of his 163rd birth anniversary along with all scientists, staff and research scholars of ZSI on 8th May 2024; attended a meeting for monitoring Cetaceans for proposed Versova-Bandra Sea Link (VBSL) at VBSL Project Office in Mumbai on 10th May 2024; attended a meeting regarding ATS 2024 (Animal Taxonomy Summit) preparatory work at Coimbatore on 11th May 2024; attended a meeting with Additional Chief Secretary, Tamil Nadu on 14th May 2024; attended a scheduled meeting at the Natural History Museum (NHM) in London on 20th May 2024 with Dr. Tim Littlewood (Executive Director of Science), Dr. John Jackson (Head of Science Policy and Communication), Dr. Roberto Portela Miguez (Senior Curator in Charge, Mammals), Dr. Patrick Campbell (Senior Curator, Reptiles), Dr. Tom White (Senior Curator, Non-Insect Invertebrates), Dr. Ranee Om Prakash (Senior Curator-Flowering Plants), Isabel Davis (Research Theme Leader, Collections and Culture), Ms. Helen Robertson (Head of Postgraduate Studies, NHM) and Dr. Jesus Hernandez. The meeting was held to discuss ongoing projects, potential collaborations, and recent advancements in the field of natural history and museum curation and the potential of ZSI working with NHM on digitizing the faunal collection in ZSI and in NHM in order to bring out the complete virtual fauna of India. On the occasion of the International Day for Biological Diversity 2024 (IBD) a special interview of Dr. Dhriti Banerjee, Director, ZSI was broadcasted on 22nd May 2024 by All India Radio (AIR). The

broad scope of the theme was underlined, connection with nature conservation, and environmental education, as well as the role of trees in the countryside and cities.

- » Dr. C. Raghunathan, Scientist- F, ZSI/HQ, Kolkata, served as a Chairman for interview committee for promotion of JRF to SRF in ZSI headquarters on 6th May 2024; provided inputs on Draft zero guidelines for Import and Quarantine of Seaweeds for their Culture and Propagation in India submitted to Ministry of Fisheries, Animal Husbandry and Dairying, Government of India; attended meeting with the Chief General Manager (Environment), Maharashtra State Road Development Corporation at Mumbai on 10th May 2024 to discuss the cetacean monitoring and benthos studies in the proposed alignment of Varsova–Bandra Sea Link; attended meeting with the Ms. Supriya Sahu, Additional Chief Secretary, Government of Tamil Nadu to discuss about the allocation of land for ZSI-SRC and ZSI-MBRC at Tiruchirapalli and Ramanathapuram districts respectively and to explore the possible collaborative studies on 14th May 2024 at Port St. George, Chennai; provided the inputs the Ministry for Ocean and Climate Change Dialogue 2024 related to two topics of the dialogue scheduled to be held from 11–12 June 2024 in conjunction with the Subsidiary Body session to be held in Bonn, Germany from 3–13 June 2024) on 16th May 2024; attended 54th Meeting of Expert Committee (ESZ) to discuss the proposals for finalization of Eco-Sensitive Zone draft notifications held on 22nd May 2024 at MoEFCC, New Delhi; attended meeting at Regional Museum of Natural History, Gangtok, Sikkim on 24th and 25th May 2024 to discuss about the role MoEFCC organizations for development of museum galleries; adjudicated a Ph.D. thesis on physico-chemical parameters and zooplankton for Thiruvalluvar University, Vellore, Tamil Nadu and report sent on 28th May 2024; attended IUCN meeting for red listing of animal species at MoEFCC, New Delhi on 30th May 2024.

- » Dr. Anil Kumar, Scientist-E and Dr. M. E. Hassan, Scientist-E, ZSI/GPRC, Patna, attended the virtual meeting in connection with group experts for IUCN Assessment on 20th and 30th May 2024, under the chairpersonship of Ms. Nameeta Prasad, Joint Secretary, MoEFCC.
- » Dr. Anil Mohapatra, Scientist-E, ZSI/EBRC, Gopalpur, attended the Department Research Committee meeting, Department of Biotechnology, Berhampur University, Bhanja Vihar on 16th May 2024.
- » Dr. Anjum N. Rizvi, Scientist-E, ZSI/HQ, Kolkata, was deputed to attend the meeting with JS in Gangtok from 23rd-26th May 2024; chaired the screening committee for the PDF/JRF/JPF for NMH funded project on 6th May 2024; performed duties as member Interview board PDF/JRF/JPF for NMHS funded project on 17th & 20th May 2024, as member Progress Evaluation Committee of SZA on 22nd May 2024.
- » Dr. Atanu Naskar, Scientist – C, ZSI/HQ, Kolkata, attended meeting for monitoring cetaceans for proposed Versova Bandra Sea Link at VBSL, Project Office at Mumbai on 10th May 2024; ATS 2024 preparatory work at Coimbatore on 11th May 2024 and a meeting with Additional Chief Secretary, Tamil Nadu on 14th May 2024.
- » Dr. Avtar Kaur Sidhu, Scientist-E and Dr. Kamal Saini Scientist-B, ZSI/HARC, Solan, attended the Audit Workshop at MOEF&CC New Delhi on 13th May 2024 organized by the Ministry of Environment Forest and Climate Change, New Delhi.
- » Dr. C. Sivaperuman, Scientist-E, ZSI/ANRC, Port Blair, attended annual review meeting of Senior Officers of ZSI Headquarters and Regional Centres from 29th April 2024 to 1st May 2024 at ZSI Headquarters, Kolkata; attended official works at Sundarbans, Kolkata in connection with the Compulsory Training course for the IFS officers to be held during December 2024; attended meeting with the officials of Maharashtra State Road Development Corporation, Mumbai on 10th May 2024; attended meeting with the officials of RMKV, Coimbatore, Tamil Nadu on 11th May 2024; attended meeting with the Ms. Supriya Sahu, IAS, Additional Chief Secretary, Environment, Climate Change and Forests Department, Government of Tamil Nadu; Shri. Ritto Cyriac, IFS, Special Secretary, Environment, Climate Change and Forests Department, Government of Tamil Nadu on 14th May 2024 at Secretariat, Government of Tamil Nadu; attended Doctoral Committee meeting at Department of Ocean Studies and Marine Biology, Pondicherry University on 17th May 2024 & 21st May 2024; attended IUCN review meeting chaired by Ms. Nameeta Prasad, Joint Secretary, MoEF&CC, Gol on 10th May 2024; attended passing board meeting at Department of Ocean Studies and Marine Biology, Pondicherry University as a Vice Chancellor nominee on 21st May 2024; attended Central Government Employees Coordination Committee meeting (CGEWCC) on 22nd May 2024; attended meeting with Shri. Keshav Chandra, IAS, Chief Secretary, Andaman and Nicobar Administration in connection with the World Environment Day 2024; attended meeting with Shri. Devesh Chandra Srivastava, IPS, Director General of Police, Andaman and Nicobar Administration in connection with the World Environment Day 2024.
- » Dr. Gaurav Sharma, Scientist – E, ZSI/NRC, Dehradun, attended virtual meeting to discuss on the Scientific matters held under the Chairpersonship of Dr. Dhriti Banerjee, Director, ZSI on 15th May 2024; acted as Chairman with five Selection Committee Members from ZSI HQ, Kolkata interviewed short-listed about 70 candidates participated from all over India for purely temporary research position of JRF, JPF, RA and Field Assistant under ZSI-NMHS Externally Funded Project at ZSI, NRC, Dehradun on 22nd May 2024; attended Internal preparatory meeting to discuss red listing of fauna species through virtual mode held under the Chairpersonship of

- The Director-in-Charge, ZSI HQ on 29th May 2024 and also attended virtual meeting to discuss about the 'Fauna Red Listing' held under the Chairpersonship of Ms. Nameeta Prasad, Joint Secretary, MoEFCC, New Delhi on 20th and 30th May 2024.
- » Dr. Indu Sharma, Scientist- E and Dr. R. H. Raina, Scientist – E, ZSI/DRC, Jodhpur, attended the meeting to discuss red listing of species IUCN status and long-term monitoring assessment of fauna organized by ZSI, HQ, Kolkata and by Ms. Nameeta Prasad, Joint Secretary, MoEF&CC, Delhi through virtual mode on 29th& 30th May 2024 respectively.
 - » Dr. J. S. Yogesh Kumar Scientist E, ZSI/SbRC, Canning, attended the Audit Para settlement drive/Adalat meeting in MoEFCC Office, Delhi from 13th to 15th May 2024.
 - » Dr. N. Marimuthu, Scientist-E, ZSI/HQ, Kolkata, attended an online meeting on "IUCN Red listing of Fauna" under the Chairmanship of Joint Secretary, Ministry of Environment, Forest and Climate Change, Government of India on 30th May 2024.
 - » Dr. P. Girish Kumar, Scientist-D, ZSI/WGRC, Kozhikode, attended the Audit workshop at MoEF&CC, New Delhi on 15th May 2024.
 - » Dr. R. Venkitesan, Scientist-E, ZSI/SRC, Chennai, attended meeting on Audit Adalat for Outstanding paras-2012-17 at MoEF New Delhi on 15th May 2024.
 - » Dr. S.D. Gurumayum, Scientist – E, ZSI/APRC, Itanagar, attended the Audit Adalat at MoEFCC, New Delhi on 14th May 2024.
 - » Dr. Sandeep Kushwaha, Scientist-C, ZSI/CZRC, Jabalpur, attended meeting at IIITDM, Jabalpur with the Registrar of the college 1st May 2024 and at JNKVV, Jabalpur with the Dean, Science of the university on 15th May 2024 and attended HIDS- Human identification conference 2024 organized by Thermo fisher scientific on 14th to 15th May, 2024.
 - » Dr. Souvik Sen, Scientist – D, ZSI/HQ, Kolkata, attended the virtual meeting on 'Red listing' under the chairpersonship of Ms. Nameeta Prasad, Joint Secretary, MoEF&CC on 20th and 30th May 2024; attended the virtual meeting on 'Collation of Public Services being rendered by Ministries/Departments and their subordinate offices' under the Chairmanship of JS(Admn.), MoEFFCC on 24th May 2024; attended the virtual meeting with States to review the preparedness of plantation activities under NIRANTAR on 31st May 2024.
 - » Dr. Tamal Mondal, Scientist-D, ZSI/HQ, Kolkata, attended an interview as expert member for the recruitment of RA-III, RA-I, JRF, JPF, PA & TA under a grants-in-aid project under NMNH on 17th and 20th May 2024; attended meetings under the chairmanship of madam Nameeta Prasad, Joint Secretary, MoEFCC regarding IUCN Assessment on 20th and 30th May 2024; attended preparedness of ATS 2024 on 21st and 29th May 2024; provided necessary comments on Shared vision of India Bangladesh Green Partnership for Sustainable Future as required by International Cooperation Division, Ministry of Environment, Forest and Climate Change through ZSI on request; provided necessary comments on Marine biodiversity conservation and coastal resilience related to Message to Parties and Observers - The Ocean and Climate Change Dialogue 2024-inputs/initiatives/achievements to ensure proper representation of the country on UNFCCC's platform in June 2024 as required by Sustainable Coastal Management Division, Ministry of Environment, Forest and Climate Change through ZSI on request; provided necessary comments on Binary indicators of the Monitoring Framework for Subsidiary Body on Scientific Technical and Technological Advise (SBSTTA-26) of the Convention on Biological Diversity (CBD) as required by Ministry of Environment, Forest and Climate Change through ZSI on request; provided necessary comments on supply of data for Updation of publication—"EnviStats-India-2024 as required by Environment Statistics Social Statistics Division, Ministry

of Statistics & PI through ZSI on request, and provided necessary comments/inputs on Draft zero guidelines for Import and Quarantine of Seaweeds for their Culture and Propagation in India as required by Department of Fisheries, Ministry of Fisheries, Animal Husbandry and Dairying through ZSI on request.

- » Dr. Uttam Saikia, Scientist- D, ZSI/NERC, Shillong, participated in a online session of Indian Bat Conservation Workshop as member of Taxonomy Working Group on the 14th May 2024 and the state level celebration of International Day for Biological Diversity at U Soso Tham Auditorium on the 22nd May 2024.
- » Nethavath Naresh, Indranil Singha (Senior Zoological Assistants) and Manik Shaw (Junior Zoological Assistant), ZSI/FBRC, Hyderabad, attended International Day for Biodiversity Programme on 22.05.2024 at KBR National Park, Hyderabad Conducted by Telangana State Biodiversity Board.
- » Officer and staff of ZSI/HARC, Solan, attended the Hindi Karyashala, lecture delivered by Dr. Baldev Singh (Retd. Professor), Government College, on 3rd May 2024 for development of Raj Bhasha Hindi.
- » Ms. Jyoshna Pradhan, SRF, ZSI/MARC, Digha, participated and presented a poster for one day seminar “The Future of Animal Science: New Discovery & Pressing Challenges” which is organized by P.G. Department Zoology, Fakir Mohan University, Balasore, Odisha on date 9th May 2024.

TRAININGS ORGANIZED

- » To promote the Raj Bhasha Hindi, ZSI/HARC, Solan, organized Hindi Karyashala on 3rd May 2024 and lecture was delivered by the resource person Hindi Retd Prof Dr Baldev Thakur, Government PG College, Shimla. Officers and Staff participated and attended Hindi Karyashala. He encouraged the use Hindi language in office work and daily life. He explained the importance of Hindi Language and made aware of different types

of applications, letters and notings in Hindi. The employees took the note of important facts and cleared their confusion regarding some Hindi words.

- » One Internship course was conducted for the M.Sc. Zoology Students of Sacred Heart College Chalakudy and Malabar Christian College, Kozhikode for one week from 29th April to 3rd May 2024 and One Internship course was conducted for the M.Sc. Zoology Students of Loyola College, Chennai for three weeks from 29th April to 17th May 2024 by WGRC, Kozhikode.
- » Dr. Anil Kumar, Scientist-E & Shri Manish Chandra Patel, Assistant Zoologist, ZSI/GPRC, Patna, provided hands on training on “observations of wetland birds” and “Collection and preservation of fishes at Baraila Lake, Vaishali” to the M. Sc. students of B. S. College, Danapur, undertaking dissertation work on Ecology and taxonomy of fishes at GPRC, Patna on 6th May 2024.
- » A five days hands on training workshop on “Collection, Preservation & Identification of Insects” was organized jointly by CZRC, Jabalpur and Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur (M.P.) from 27th to 31st May 2024.
- » Eight students of M.Sc., Department of Zoology, University of Kanpur are undergoing internship training in various sections of Zoological Survey of India, Kolkata.

TRAININGS ATTENDED

- » Dr Kamal Saini, Scientist-B, ZSI/HARC, Solan, attended the General Lok Sabha Election Micro Observer Training at DC Office Solan on 15th to 22nd May 2024.
- » Officers and staff members, ZSI/MARC, Digha, participated and attended election duty for the General Election 2024 from 23rd and 24th May 2024 and election counting training duty for the General Election 2024 on 29th May 2024.
- » Dr. Anil Kumar, Scientist-E, ZSI/GPRC, Patna, attended Training for General Election

2024 on 26th May 2024 and 30th May 2024. Dr. M. E. Hassan, Scientist-E, ZSI/GPRC, Patna, attended three trainings for the forthcoming General Election duty on 6th, 9th and 24th May 2024 and visited B. S. Collage, Danapur in connection with election duty on 30th May 2024. Three Administrative and eight Scientific staffs of GPRC Patna also attended Training for General Election 2024.

LECTURES DELIVERED

- » Gaurav Sharma, Scientist-E, ZSI/NRC, Dehradun, delivered lecture on topic entitled “Status of Mammals, threat and their conservation in India” to 100 School Students & 10 Faculty of “Lions Bal Vidya Mandir Sr. Sec. School, Pilibhit, Uttar Pradesh” at ZSI, NRC, Dehradun on 16th May 2024; delivered lecture on topic entitled “Status of Faunal Diversity and their conservation in India” to 04 Faculty and 48 students of four schools of Dehradun on the occasion of celebration of “*International Day for Biological Diversity*” programme jointly organized in collaboration with Uttarakhand State Education Research Centre, Government of Uttarakhand at ZSI, NRC, Dehradun on 22nd May 2024; delivered lecture on topic entitled “Status of Faunal Diversity in India” to M. Sc. Zoology students of Kurukshetra University, Haryana in the conference hall of ZSI, NRC, Dehradun on 28th May 2024.
- » Dr. Indu Sharma, Scientist-E, ZSI/DRC, Jodhpur, delivered lecture to about 50 students on “Land restoration and Desertification” under Mission LIFE Programme.
- » Dr. Narender Sharma, Scientist-E, ZSI/NRC, Dehradun, delivered lecture on “Collection, Preservation & Identification of Insects” to the M.Sc. Zoology students of Kurukshetra University, Haryana on 30th May 2024.
- » Dr. P. S. Bhatnagar, Scientist – E, ZSI/CZRC, Jabalpur, delivered lectures on faunal groups under training programme of M.Sc. students of CSJM Kanpur University & Sagar University, Madhya Pradesh on 14th May 2024; on “Linking taxonomy with conservation” to M.Sc. students of Sagar University, Madhya Pradesh on 22nd May 2024; on general collection, preservation and identifications of Insects in “Workshop on Collection, Preservation and Identification of Insects” at Department of Entomology, Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur (M.P.) on 27th and 30th May 2024.
- » Dr. S. D. Paunekar, Scientist – E, ZSI/CZRC, Jabalpur, delivered lectures on faunal groups under training programme of M.Sc. students of CSJM Kanpur University & Sagar University, Madhya Pradesh on 16th May 2024 and on general collection, preservation and identifications of order Odonata & order Lepidoptera: Moth” at Department of Entomology, Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur (M.P.) on 28th May 2024.
- » Dr. Sandeep Kushwaha, Scientist – C, ZSI/CZRC, Jabalpur, delivered lectures on collection, preservation and identifications of Museum specimens at ZSI/CZRC/ Jabalpur under training programme of M.Sc students of CSJM Kanpur University, Madhya Pradesh on 9th May 2024; on taxonomy of Lygaeidae & Coreidae of Madhya Pradesh at ZSI/CZRC/ Jabalpur in under training programme of M.Sc. students of Sagar University, Madhya Pradesh on 10th and 16th May 2024, on collection, preservation and identifications of Order Hemiptera in “Workshop on Collection, Preservation And Identification Of Insects” at Department of Entomology, Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur (M.P.) on 29th May 2024 and on “hotspots of biodiversity” on international biodiversity day on 22nd May 24.
- » Dr. Jayita Sengupta, Senior Zoological Assistant, ZSI/HQ, Kolkata, delivered a lecture on dipteran flies in a webinar at online workshop on “Collection, preservation and identification of dipteran insects” on 30th May, 2024 organized by Dept. Of Entomology, JNKVV & CZRC, ZSI, Jabalpur.

- » Mr. Akhil Nair, Asst. Zool, ZSI/CZRC, Jabalpur, delivered a lecture on collection, preservation and identifications of Lepidoptera: Butterfly in “Workshop on Collection, Preservation and Identification of Insects” at Department of Entomology, Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur (M.P.) on 29th May 2024.
- » Mr. Bhaskar Saikia, Asstt. Zoologist, ZSI/NERC, Shillong, delivered a talk on “Biodiversity and Natural History Science” for the students and on 29th May 2024, as a part of weeklong celebration of World Environment Day, 2024.
- » Mrs. Pallabi Priyadarsini, Asst. Zool., ZSI/CZRC, Jabalpur, prepared one video on Wildlife Museum of CZRC & gave presentation on Role of Museum in shaping young minds 17th May 2024.

PHOTO GALLERY



ZSI Annual Progress Monitoring Meeting of Senior Officers of HQ and Regional Centres continued till 01.05.2024 and released ZSI-EIACP Newsletter (2023-24) at ZSI, HQ, Kolkata under the Chairmanship of Dr. K. Venkataraman, Former Director, ZSI and the External Member Dr.Urmi Chatterji, Professor, Calcutta University.



On 4th May, 2024, Dr.Dhriti Banerjee, Director, ZSI attended Alumni of Mahadevi Birla World Academy as a chief Guest.





On May 8, Director, ZSI and all scientists, staff and research scholars of ZSI paid tribute to the Nobel laureate Rabindranath Tagore on the occasion his 163rd birth anniversary.



Attended a meeting for monitoring Cetaceans for proposed Versova-Bandra Sea Link (VBSL) at VBSL Project Office in Mumbai on 10th May, 2024.



On the occasion of the International Day for Biological Diversity 2024 (IBD) a special interview of Dr.Dhriti Banerjee, Director, ZSI was broadcasted on 22nd May, 2024 by All India Radio (AIR).The broad scope of the theme was underlined, connection with nature conservation, and environmental education, as well as the role of trees in the countryside and cities.







On May 20, 2024, Director ZSI, attended a scheduled meeting at the Natural History Museum (NHM) in London, with Dr. Tim Littlewood (Executive Director of Science), Dr. John Jackson (Head of Science Policy and Communication), Dr. Roberto PortelaMiguez (Senior Curator in Charge, Mammals), Dr. Patrick Campbell (Senior Curator, Reptiles), Dr. Tom White (Senior Curator, Non-Insect Invertebrates), Dr. Raneer Om Prakash (Senior Curator-Flowering Plants), Isabel Davis (Research Theme Leader, Collections and Culture), Ms Helen Robertson (Head of Postgraduate Studies, NHM) and Dr. Jesus Hernandez. The meeting was held to discuss ongoing projects, potential collaborations, and recent advancements in the field of natural history and museum curation and the potential of ZSI working with NHM on digitizing the faunal collection in ZSI and in NHM in order to bring out the complete virtual fauna of India.





Dr. Dhriti Banerjee, Director, ZSI along with Dr. C. Raghunathan, Scientist-F, Dr. C. Sivaperuman, Scientist-E and other officers attended a meeting with Ms. Supriya Sahu, Additional Chief Secretary, Government of Tamil Nadu to discuss allocation of land for the establishment of Regional Centres of ZSI on 14th May 2024 at Fort St. George, Chennai