ZSI EPNEUS Vol. 58 | November 2023 | Monthly E-Newsletter from Zoological Survey of India











ZSI <mark>=-</mark>News



Cover

Great Mormon *Papilio mennon agernor* Linnaeus, 1758 Courtesy: ANRC, Port Blair

Published by

The Director, Zoological Survey of India, Kolkata, INDIA Email: director@zsi.gov.in Website: www.zsi.gov.in

Edited by

Dr. Dhriti Banerjee Dr. C. Raghunathan Dr. S. Sheela Dr. Tamal Mondal

Citation

Zoological Survey of India, 2023: E-NEWS, 58: 1-32

From the Director's Desk

Heartiest Greetings to our readers during the end of the year!

I am very happy to bring out the November 2023 Edition of ZSI E-News for the august readers to update them about the activities, events, and discoveries of the Zoological Survey of India and all the 16 regional centres situated across the country.

Extensive explorations on faunal diversity of wide ranges of ecosystems were carried out by the scientists of this institution covering West Bengal, Arunachal Pradesh, Odisha, Sikkim, Tamil Nadu, Kerala, Karnataka, Maharashtra, Uttarakhand, Bihar, and Andaman and Nicobar Islands. Half-Yearly Progress Monitoring Committee meeting of the Zoological Survey of India, HQ's, Kolkata and Regional Centres was conducted from 2nd November to 5th November 2023 at Desert Regional Centre, ZSI, Jodhpur to evaluate the Scientific, Accounts and Administrative Progress made during the period of 1st April to 30th September 2023. To monitor and strengthen the scientific activities of the organization, the 18th Meeting of the Research Advisory and Monitoring Committee (RAMC) of ZSI was organized at Udhagamandalam, the Nilgiris, Tamil Nadu on 17th and 18th November 2023. Participation was made in "Actioning Incentives for Biodiversity and Landscapes" held in Kathmandu, Nepal from 29th to 30th November 2023 as subject expert to represent MoEF&CC in the two-day workshop and multilateral meeting on the occasion. Capacity-building training programmes were organized for Range Forest Officers, university students, and colleges in ZSI, HQs, and other regional centres. Altogether 1392 species of faunal communities beloning to 11 phyla are identified during the month. Description of eight new species under the vertebrate and invertebrate faunal group during the month is worth mentioning along with 16 newly recorded faunal communities.

I extend my compliments to all the officers and staff of ZSI for their outstanding contributions during the month.

With best wishes for the successful publication of this E-News edition.

Jai Hind

Dr. Dhriti Banerjee

Director 5th December 2023 Kolkata

HEADQUARTERS, KOLKATA

Surveys were conducted to different locations of Birbhum, Bankura, West Bardhaman, Kalimpong and Darjeeling districts of West Bengal, Anjaw district of Arunachal Pradesh, Subarnarekha estuary of Odisha, Sikkim, Tamil Nadu, Kerala, Karnataka, and Maharashtra. A total of 707 species of faunal communities including Protozoa, Acari, Apterygota, Chalcididae, Dermaptera, Diptera, Ephemeroptera, Hymenoptera, Lepidoptera, Orthoptera, Odonata, Crustacea, Chilopoda, Arachnida, Annelia, Nematode, Trematode, Mollusca, Porifera, Cnidaria, Echinodermata, Pisces, and Aves were identified.

Five species of Acari, Protozoa, Diptera, Annelida, and Pisces were described new to science and one species of Acari and two species of Lepidoptera were reported new to Indian Fauna. A total 12 species of faunal communities belonging to Diptera, Hemiptera, Nematode, Trematode, Hymenoptera, Annelida were augmented to National Zoological Collections. Identification and Advisory services were rendered to Hapten Biosystems Private Limited, Goregaon, Mumbai; Department of Entomology, GKVK, Bangalore; BCKV, West Bengal; the Forest Range Officer, Katwa S.F. Range Natungaram, Katwa; Assam

Agricultural University, Jorhat, Assam; Kazi Najrul University, Department of Animal Science, Asansol; Department of Biotechnology, Vignan's University, Andhra Pradesh; Nagaland University; and Medziphema Campus and Central Tasar Research & Training Institute, Ranchi, Jharkhand. Visitors from D.M College of Science, D.M.U, Imphal, Manipur; Ramakrishna Mission Vidyamandir, Belur Math, Howrah; Fakir Mohan University; Manipur University; D.M. College of Science, Dhanamanjuri University, Imphal and Dr. Taylor from Germany visited the headquarter during the



NORTH EASTERN REGIONAL CENTRE, SHILLONG, MEGHALAYA

A total of 66 species of faunal communities including Hemiptera, Orthoptera, Odonata, Decapoda, Pisces, Amphibia, Reptilia, and Mammalia were identified during the month. Identification and advisory services were rendered to Wildlife Institute of India, Dehradun, IISER, Bhopal, Martin Luther Christian University and to St. Peter's Higher Secondary School, Shillong. Constitution Day was celebrated in the centre.

Greater Bamboo bat Tylonycteris malayana Chasena



Capacity building Workshop on Vertebrate Taxonomy organized by USTM, Meghalaya in association with ZSI, Shillong from 9th -10th November 2023

WESTERN REGIONAL CENTRE, PUNE, MAHARASHTRA

One survey was conducted to Karnataka and Kerala. A total of 74 species of faunal communities including Crustacea, Blattoea, Coleoptera, Hemiptera, Hymenoptera, Lepidoptera, Mollusca, Pisces, Amphibia, and Mammalia were identified during the month. Identification and advisory services were rendered to Maharashtra State Forest Department, Dept. of Entomology, N.M. College of Agriculture, Navsari, Gujarat, and ICAR-Directorate of Floricultural Research, Hadapsar Campus, Pune, Maharashtra. Constitution Day was celebrated.



Land snail, Indrella ampulla (Ariophantidae)



Malabar giant squirrel, Ratufa indica

CENTRAL ZONE REGIONAL CENTRE, JABALPUR, MADHYA PRADESH

A total of 83 species of faunal communities including Orthoptera, Lepidoptera, Hemiptera, Mollusca, Pisces, and Amphibia were identified during the month. Identification and advisory services were rendered to PAU, RRS Faridkot. Constitution Day was celebrated. Dr. Nidheesh T.D., Scientist-B (Entomology), Forest Protection Division of ICFRE-TFRI, Jabalpur along with his three technical subordinates visited the ZSI Museum and campus. A total of 100 students of class 9th to 12th along with their teachers from CM Rise School, Patan, Jabalpur visited CZRC, Jabalpur on 25th November 2023.



Wild Boar (*Sus scrofa* Linnaeus, 1758) spotted at Panna National Park.

100 students from the CM Rise Govt. Senior Secondary School Patan Jabalpur visiting the CZRC ZSI Centre.



DESERT REGIONAL CENTRE, JODHPUR, RAJASTHAN

A total of 54 species of faunal communities including Insecta, Mollusca, and Pisces were identified during the month. The Half-Yearly Monitoring Committee meeting of the Zoological Survey of India was organized from 2nd to 5th November 2023 at Jodhpur under the guidance of Dr. Dhriti Banerjee, Director, Hqs, Kolkata. "Tritiya Janjatiya Gaurav Diwas", 148th # Birsa Munda Jayanti and Constitution day were celebrated in the centre. Teachers from Sri Aurobindo Centre of New Education, Jodhpur visited the centre.



Ardea alba Linnaeus, 1758 (Great egret)

Celebration of Vigilance Awreness Week and Janjatiya Gaurav Diwas at DRC, Jodhpur

NORTHERN REGIONAL CENTRE, DEHRADUN, UTTARAKHAND

A survey was conducted to Kedarnath Wildlife Sanctuary, Uttarakhand. A total of 66 species of faunal communities including Phthiraptera, Orthoptera, Lepidoptera, Hymenoptera, Pisces, Amphibia, and Reptilia were identified during the month. The Officer-in-Charge and staff organized and participated in "MoEFCC, Govt. of India initiative Mission Life Programme- Save Water, Save Electricity" awareness Rally and Special Campaign 3.0 Swachhta Cleanliness Drive Programme in and around the office campus and Kaulagrah Market, Dehradun on 9th and 21st November 2023. Constitution Day was celebrated.



Himalayan Tahr, *Hemitragus jemlahicus* (Smith, 1826) at Kedarnath Wildlife Sanctuary, Uttarakhand



Special Campaign 3.0 Cleanliness Drive around Dehradun City



Zoological Survey of India

ZSI E-News

SOUTHERN REGIONAL CENTRE, CHENNAI, TAMIL NADU

A survey on Current Status and Distribution of Endemic Odonata of India was conducted in Kodagu and Chikmagalur District of Karnataka State and Idukki District of Kerala. A total of 109 species of faunal communities including Hemiptera, Lepidoptera, Odonata, Psocoptera, Mollusca, Fishes, Amphibia, and Reptiles were identified during the month. Scientist of this centre, discovered new species of Psocoptera, Lichenomima aldretei Ramesh, Babu & Subramanian, 2023 from Sathyamangalam Tiger Reserve, Tamil Nadu and Middle Eocene Sarcoptid mite Sarcoptes kutchensis Agnihotri et al., 2023 in amber from the Umarsar Lignite Mine of Kutch, Western India. Two identification and advisory services were provided for Pisces and Mollusca to the Department of Zoology at PSGR Krishnammal College for Women in Coimbatore, Tamil Nadu, and the National Centre for Coastal Research (NCCR) in Chennai, respectively. Forty Range Officers Trainees from the Tamil Nadu Forest Department visited the Zoological Survey of India's Chennai campus, where they received lectures on various faunal groups.





Calocypha laidlawii



Nilgiritragus hylocrius

GANGETIC PLAIN REGIONAL CENTRE, PATNA, BIHAR

Two long term surveys were undertaken during this month under the Annual Programmes Fauna of Bihar State (Invertebrates) Part II during 30th October to 12th November 2023 and Fauna diversity of Kaimur Wildlife Sanctuary, Bihar from 24th November to 30th November 2023. A total of 32 species of faunal communities including Insecta, Mollusca and Fishes were identified during the month. Constitution Day was celebrated.

Spilostethus hospes [Fabricius, 1794]



Combined faunistic survey was conducted to Bihar under the programme "Fauna of Bihar State [Invertebrates] Part II" from 30th October to 12th November 2023

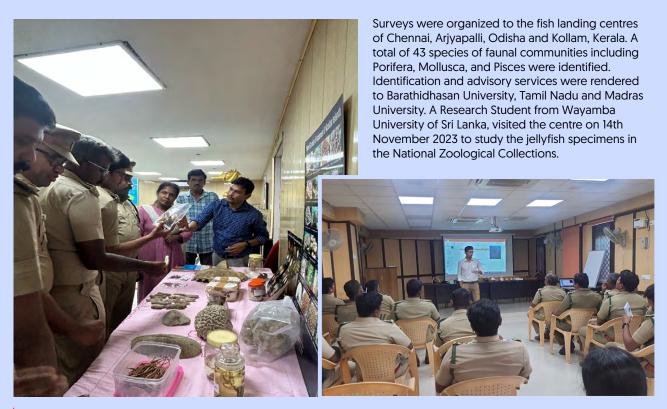
HIGH ALTITUDE REGIONAL CENTRE, SOLAN, HIMACHAL PRADESH



A total of 47 species of faunal communities including Insecta, and Pisces were identified during the month. Identification and advisory services were rendered to Department of Fruit Sciences, Punjab Agricultural University, Ludhiana, Punjab, and Department of Floriculture, Punjab Agricultural University, Ludhiana, Punjab. The 3rd Janjatiya Gaurave Diwas and Constitution day were celebrated during the month, where employees have also participated in online quiz programme "Bharat - Loktantra ki Janani".

Celebration of Jan jatiya Diwas on 24th November 203 at ZSI, Solan

MARINE BIOLOGY REGIONAL CENTRE, CHENNAI, TAMIL NADU



Training programme on 'Identification of Scheduled Marine Species'.



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

Local surveys were conducted to South Andaman and one survey was conducted to North & Middle Andaman. A total of 108 species of faunal communities including Fishes, Mollusca, Coleoptera, Lepidoptera were identified during the month. Identification and advisory services were rendered to Ms. Pillai Food Agencies, Port Blair. Research Scholars of this centre participated in the trekking organized by the Hon'ble Member of Parliament at Mount Harriet National Park as a part of awareness training to the NCC students on 23rd November 2023. Total of 200 NCC students and mentors from different parts of the country visited the ANRC museum on 23rd November 2023 along with Hon'ble Member of Parliament, A & N Islands.







SUNDERBAN REGIONAL CENTRE, CANNING, WEST BENGAL

A one day local survey was undertaken in Diamond Harbour. A total of 80 species of faunal communities including Crustacea, Mollusca, and Pisces were identified during the month. Constitution Day was celebrated and Mission LiFE program was organized on 26th November 2023 in Amjhara Village, Basanti Block, South 24 Paraganas with 48 students and 4 teachers from different schools.



Celebration of Constitution Day

Mission LiFE campaign

FRESHWATER BIOLOGY REGIONAL CENTRE, HYDERABAD, TELANGANA

A total of 101 species of faunal communities including Coleoptera, Hemiptera, Mollusca, Rotifera, Crustacea, Pisces, and Amphibia were identified during the month. Scientist of the centre evaluated Wirpo Earthion Projects both for Telangana and Andhra Pradesh for the year of 2023-24. Vigilance Awareness Week, Janjatiya Gaurav Divas and Constitution day was observed during the month.



Macaca mulatta (Zimmermann, 1780)



Parus cinereus Vieillot, 1818 Cinereous Tit



WESTERN GHATS REGIONAL CENTRE, KOZHIKODE, KERALA

One major survey tour was conducted to tea gardens of Hassan, Chikkamagaluru, and Kodagu districts of Karnataka. A total of 72 species of faunal communities including Testate amoebae, Coleoptera, Hemiptera, Mantodea, Arachnida and Hymenoptera were identified during the month. One species of Hymenoptera was described as new to science and 11 species of Testate amoeba and one species of Mantodea was recorded as newly added to Indian fauna. The WGRC team attended the inauguration function and provided museum specimens for the Zoology exhibition stall at the Department of Zoology on behalf of Sasthrayaan 2023 Open House programme organized by the University of Calicut from 16th to 18th November 2023. Identification and advisory services were rendered to College of Agriculture Jawaharlal Nehru Krishi Viswa Vidyalaya Campus, Jabalpur, Madhya Pradesh. (Tribal Pride Day) and Constitution Day were celebrated.



Celebration of Constitution Day



Janjatiya Gaurav Divas

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

Surveys were conducted to Devi and Nuanai Estuarine system and to the East coast of India. One day local survey to Bahuda estuary was conducted. A total 109 species of different faunal groups were identified during the month. *Ophichthus naevius* Kodeeswaran, Kathirvelpandian, Mohapatra, Kumar, Sarkar, 2023 a new species of fish from the family Ophichthidae was described. Shri Sandip Kumar Mohapatra, SRF of the center received the best oral presentation award in the National Conference on Biological Sciences in the Post-genomic era, organized by Berhampur University, Bhanja Vihar, Ganjam, Odisha, India from 3-4th November 2023.

ARUNACHAL PRADESH REGIONAL CENTRE, ITANAGAR, ARUNACHAL PRADESH

One local survey was conducted at Lower Chimpu. A total of 75 species of faunal communities including Lepidoptera, Orthoptera, Hemiptera, Millipede, Mollusca, Pisces, Amphibia, and Reptilia were identified. In commemoration of Vigilance Awareness week, the centre organized a painting competition at ZSI, APRC, Itanagar on 3rd November 2023 with the students of Hornbill Residential English School, Senki Valley, Itanagar. Mission LiFE campaign was organized at the DC Office, Capital Complex, Itanagar in the presence of Deputy Commissioner, Shri Talo Potum on Conservation of Water on 9th November 2023.



Observing of Vigilance Awareness among the students form Hornbill Residential School, Itanagar



Rastriya Ekta Diwas Pledge by the staffs of APRC, ZSI, Itanagar on 30th October 2023



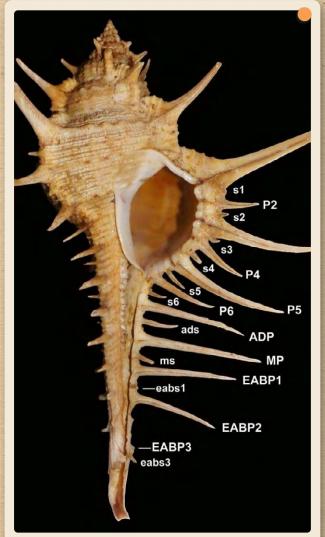
Mission LiFE campaign with Shri Talo Potum DC, Itanagar



Vindula erota erota (Fabricius, 1793)

MARINE AQUARIUM AND REGIONAL CENTRE, DIGHA, WEST BENGAL

Local survey was conducted to Digha and adjacent areas. A total of 66 species of faunal communities including Polychaete, Mollusca, Pisces and Nematoda were identified during the month. Students from Raghunathpur Junior High School, Haldia, St. Xavier's College, Ranchi, Pandu College, Guwahati and students and faculty from Dhanamanjuri University, Manipur visited the centre during the month. Constitution day was celebrated at the centre.



Murex indicus Houart, 2011



Celebration of Constitution Day, 2023



Intermediate students from St Xavier's College, Ranchi , Jharkhand visited on 9th November 2023



One day training program conducted for officials from West Bengal Forest Department on 4th November 2023.

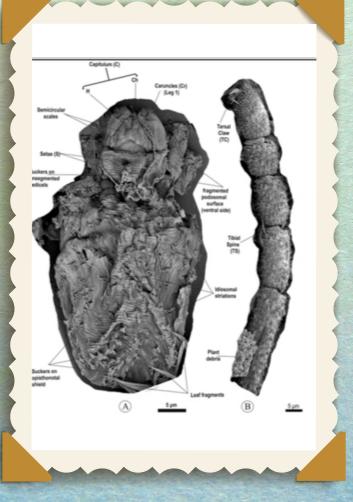
NEW DISCOVERIES NEW SPECIES



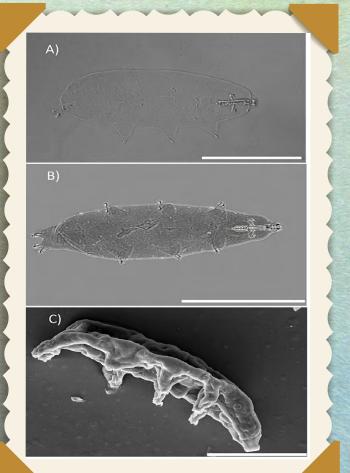
Taeniogonalos dhritiae Girish Kumar & Hegde, 2023



Glyptothorax primusplicae Shangningam & Kosygin, 2023

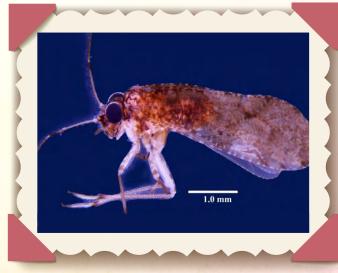


Sarcoptes kutchensis Anihotri et al. 2023

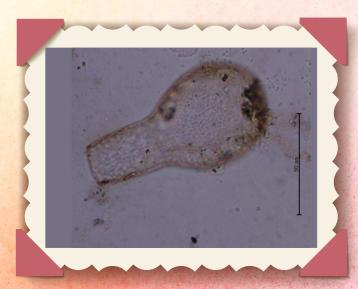


Paramacrobiotus bengalensis sp. nov.





Lichenomima aldretei Ramesh et al., 2023



Argynnia gertrudeana Jung, 1942



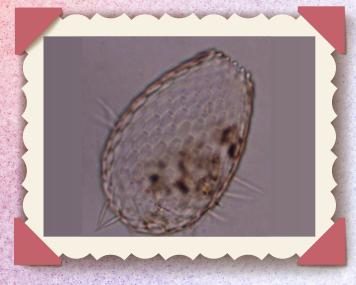
Arcella formosa Nicholls, 2005



Centropyxis kurakchayensis Snegovaya et Alekperov, 2005

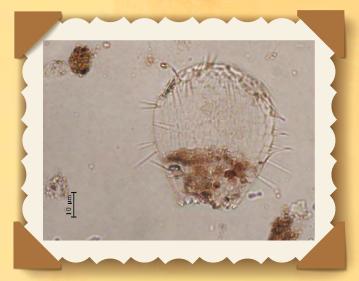


Centropyxis loffleri Laminger, 1971

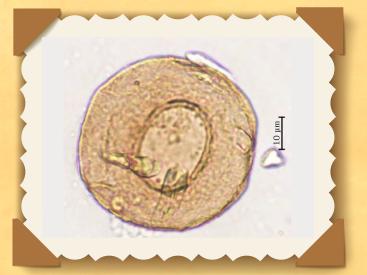


17

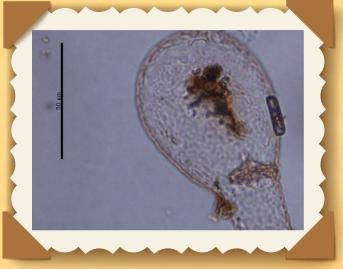
Euglypha marginata Van Oye, 1958



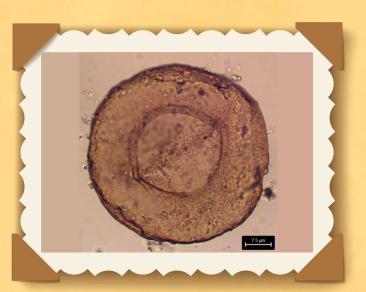
Euglypha strigosa heterospina Wailes, 1912



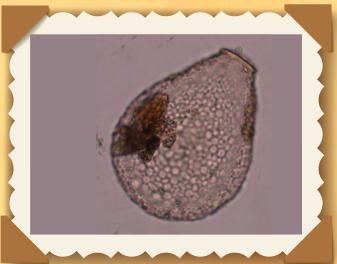
Galeripora scutelliformis Playfair, 1918



Nebela spumosa Awerintzew, 1906



Galeripora bathystoma (Deflandre, 1928) Gonzalez-Miguens et al., 2021



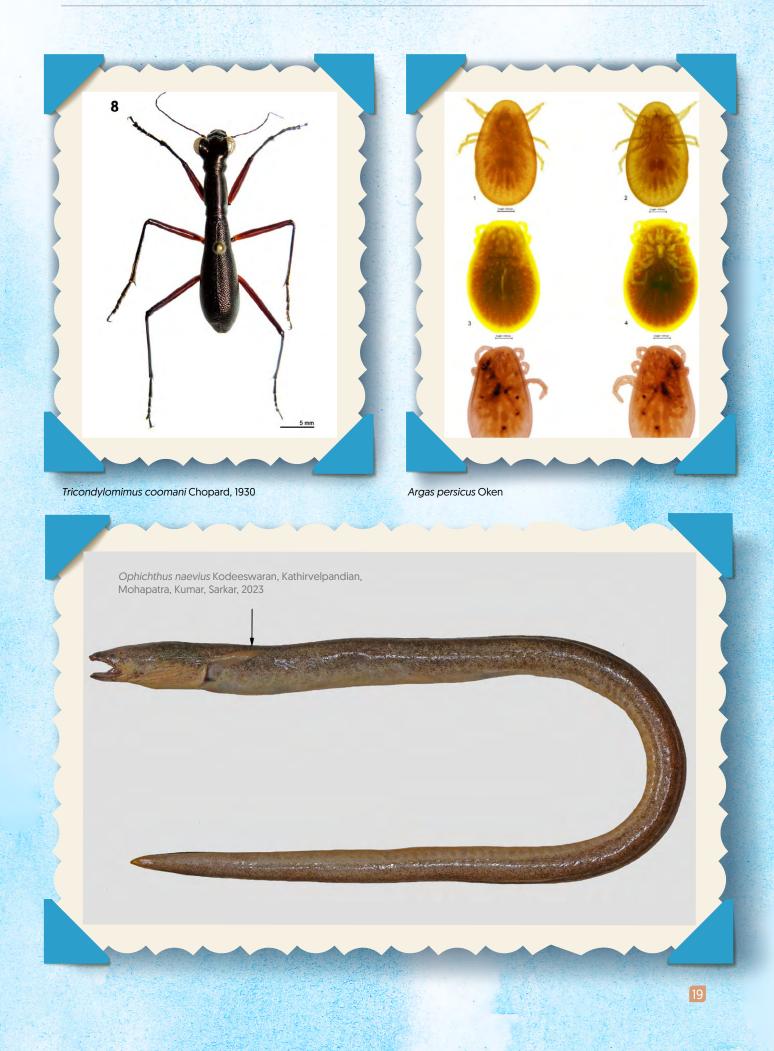
Nebela parvula Cash, 1908



Physochilla tenella Penard, 1893



Zoological Survey of India





PUBLICATIONS

 Agnihotri, P., Singh, H., Subramanian, K.A. and Acharya, S. 2023. Scanning electron microscopy of Sarcoptes kutchensis, a new species of a middle Eosene sarcoptid mite in amber from the Umarsar Lignite Mine of Kutch, Western India. *Historical Biology.* https://doi.org/10.1080/08912963.2023.2281579

PAPERS

- Ahmed, S., Julka, J. M., Banerjee, D. and Marimuthu, N. 2023. A new species of the genus *Eutyphoeus* Michaelsen 1900 (Clitellata: Acanthodrilidae) from the North-Eastern Biogeographic Zone, India. *Zootaxa*, 5380(2): 167–172.
- Bakra, D., Sheela, S. and Bhattacharyya, S. 2023. Diversity and distribution of Ants (Hymenoptera: Formicidae) in western sector of Sunderbans, India. *Journal of the Maharaja Sayajirao University of Baroda*, 57(1): 66-67.
- Banerjee, S., Sreeraj, C.R., Sen, A. and Raghunathan, C. 2023. Four new Records to the Malacofauna of West Bengal from Sunderban Biosphere Reserve, India. Uttar Pradesh Journal of Zoology, 44 [21]: 227-235.
- Basu, S., Babu, R., Siddique, A. and Purushothaman, J. 2023. Integrative description of *Paramacrobiotus bengalensis* sp. nov. (Tardigrada: Eutardigrada: Macrobiotidae), a new limno-terrestrial tardigrade species from the state of West Bengal, India. *European Journal of Taxonomy*, 890: 23–48. https:// doi.org/10.5852/ejt.2023.890.2249
- Bharti, D., Pathania, P. C. and Kumar, S. 2023. Morphological characterization of two newly recorded ciliates Uroleptus (Caudiholosticha) stueberi (Foissner, 1987) Li et al., 2017 and Climacostomum virens (Ehrenberg, 1838) Stein, 1859 from India. Records of the Zoological Survey of India, 123(2): 143-150.
- Bhatnagar P. S. and Mazumdar P. C. 2023. Postural behavior of rhesus monkeys at high altitude (Shimla and low altitude area in Himachal Pradesh. International Journal of Global Science Research, 10(2): 2188-2196.
- Bhatnagar P.S., Kushwaha, S., and Nair, A. 2023. A study of coccinellid (Insecta: Coleoptera: Coccinellidae) fauna of Karnataka (Uttar Kannada, Udipi and Mangalore Dakshin Kannada) Districts. International Journal of Global Science Research, 10(2): 2203-2209.
- Bhatnagar, P. S. and Mazumdar, P. C. 2023. Behavioural thermoregulation in langur Monkeys in Puri District, Odisha. *International Journal of Global Science Research*, 10(2): 2132-2140.

- Bindu, L. 2023. Diversity of testate amoebae (Amoebozoa and Cercozoa) in Western Ghats of Kerala with 8 new records to India. *Records of the Zoological Survey of India*, 123(2): 117-134.
- Bindu, L. 2023. Three newly recorded species join India's testate (Protozoa: Amoebozoa) fauna. International Journal of Global Science Research, 10[2]: 2127-2131.
- Das, A. K., Behera, R. K., Mohapatra, S. K., Acharya, S., Mohanty, S. R., Tripathy, B. and Mohapatra, A. 2023. First photographic evidence of Fishing Cat, Prionailurus viverrinus (Bennett, 1833) in Tampara Lake, Ganjam, Odisha. Records of *Zoological Survey of India*, 123 (2): 159 – 164.
- Deb, R., Takawane, P. and Subramanian, K.A. 2023. Sacred river of Pune: boon or bane for the diversity of aquatic beetles (Insecta: Coleoptera). *Journal of Threatened Taxa*, 15(10): 24043–24053. https://doi. oarg/10.11609/jot.8514.15.10.24043-24053
- Ghosh, A., Krishnan, S., Bharti, D., Pathania, P.C. and Kumar, S. 2023. Morphology of Indian populations of Uroleptus (Caudiholosticha) stueberi (Foissner, 1987) Li et al., 2016 and Climacostomum virens [Ehrenberg, 1838) Stein, 1859. Records of the Zoological Survey of India, 123(2): 143-150 (NAAS 4.82).
- Ghosh, A., Kumar, V., Acharya, S., Banerjee, D. and Tyagi, K. 2023. New distribution record of soft ticks Argas (persicargas) persicus Oken from West Bengal, India. *Halteres*,14:1-4 https://zenodo.org/ records/8077978
- Girish Kumar, P. and Hegde, V.D. 2023. Additions to the knowledge of *Taeniogonalos Schulz*, 1906 (Hymenoptera: Trigonalyidae) from India with the description of a new species from Western Ghats. *Zootaxa*, 5361[4]: 566–572. https://doi.org/10.11646/ zootaxa.5361.4.6
- Jagdale, P., Magdum, S. and Kalawate, A.S. 2023. A new record of the genus Onthophagus Latreille, 1802 [Coleoptera: Scarabaeidae] from Northern Western Ghats, Maharashtra, India. Journal of Bombay Natural History Society.
- Jaiswal, D., Bharath, B., Karuthapandi, M., Jadhav S. and Kunte, K. 2023. New distributional record of Diard's Blindsnake, Argyrophis diardii (Schlegel, 1839) from the Eastern Ghats of Andhra Pradesh, India. *Reptiles & Amphibians*, 30:e19492.
- 19. Kamila, A.P. and Sureshan, P.M. 2024. First report

of the genus *Tricondylomimus Chopard*, 1930 (Mantodea: Gonypetidae) from India with a note on its geographical distribution. *Journal of Insect Biodiversity and Systematics*, 10.

- Kodeeswaran, P., Kathirvelpandian, A., Mohapatra, A., Ajith Kumar, T. T. and Sarkar U.K. 2023. A new snake eel species of the genus *Ophichthus* (Anguilliformes: Ophichthidae) from the southeast coast of India, Bay of Bengal with taxonomic account of *Ophichthus chilkensis. Journal of Fish Biology*. https://doi. org/10.1111/jfb.15617
- Kumar, R. and Pathania, P.C. 2023. Status of Chrysodeixis chalcites Esper and C. eriosoma (Doubleday) of family Noctuidae (Lepidoptera) in India as determined by DNA barcoding and Morphological characterization. Records of the Zoological Survey of India, 123(1): 37-43, 2023.
- Kumar, R. R. and Praveen, K. 2020. First record of *Cantharus melanostoma* (Sowerby, 1825) (Gastropoda) from Andhra Pradesh Coast. Records of the *Zoological Survey of India*, 120(1):95-96.
- Mondal, S., Ganesh, S.R. and Raghunathan, C. 2023. Some rare species of sea snakes (Hydrophis, Microcephalophis) from the Indian Coasts and nearby waters, lodged in major systematic Indian zoological collections. *Bonn Zoological Bulletin*, 72(2): 209–222.
- Mukherjee, K., Pramanik, D., Naskar, A. and Banerjee, D. 2023. A new species of *Thinophilus Wahlberg* (Diptera: Dolichopodidae: Hydrophorinae) from coastal India with re-description of *Thinophilus tesselatus* Becker (Diptera: Dolichopodidae: Hydrophorinae). *Zootaxa*, 5375[4]: 478-494.
- 25. Pandher, M.S. 2023. First record of Apatania aison Malicky, 1997 (Insecta: Trichoptera) from India. Records of the Zoological Survey of India,123(2):135-137.
- Pati, S.K., Mohanty, S.R. and Mohapatra, A. 2023. First record of a potamid crab (Decapoda: Brachyura) from Odisha state, India. Nauplius, 31: e2023020. https://doi. org/10.1590/2358-2936e2023020
- Patra, S., Ray, D., Patro, S. and Mohapatra, A. 2023. Range extension of Checkered goby *Gobiopsis canalis* Lachner & McKinney, 1978 (Gobiiformes: Gobiidae) to northeastern Indian Ocean. *Thalassas: An International Journal of Marine Sciences*, 39(2): 791 – 795 https://doi.org/10.1007/s41208-023-00608-8
- 28. Paunikar, S. and Kaneez, F. 2023. Morphometric characters and meristic counts of two freshwater fishes of order Cypriniformes from Song River, Dehradun, Uttarakhand. *International Journal of Zoology and Applied Biosciences*, 8(6): 1-6.
- 29. Paunikar, S. and Priyadarsini, P. 2023. Species diversity of Decapods crustacean across the Fish Market of Jabalpur City, Madhya Pradesh, Central India. *Multilogic in Science (Journal of Applied Science)*, 13 (47): 1073-1076.

- Priyadarsini, P. and Kushwaha, S. 2023. Assessment of Malcofaunal diversity of Bilaspur district, Chhattisgarh from the collection of National Zoological Collection of Zoological Survey of India, Jabalpur, Madhya Pradesh. International Journal of Global Science Research, 10[2]: 2156-2162.
- Ramesh, G., Babu, R. and Subramanian, K.A. 2023. A new species of the genus *Lichenomima* Enderlein, 1910 (Psocodea: 'Psocoptera':Myopsocidae) from India. *Zootaxa*, 5374(4): 575–584. https://doi. org/10.11646/zootaxa.5374.4.8
- Shangningam, B.D. and Kosygin, L. 2023. *Glyptothorax primusplicae*, a new species of rheophilic catfish (Teleostei: Sisoridae) from the Chindwin basin, Manipur. *Journal of Natural History*, 57(33–36): 1598–1609. [https://doi.org/10.1080/00222933.2023.22 60542]
- 33. Siddique, A., Basu, S., Prasad, H., Bhowal, A., Changarangath, P.R. and Purushothaman, J. 2023. Morphological and molecular characterisation of ghost jellyfish *Cyanea nozakii* (Cnidaria: Scyphozoa) forming a swarm in the Bay of Bengal, Indian Ocean. *Regional Studies in Marine Science*, [68]https://doi. org/10.10 16/j.rsma.2023.103271.
- Sreeraj, C.R., Sen, A. and Raghunathan, C. 2023. First records of two gobies, *Eugnathogobius kabilia* and *Pseudogobius fulvicaudus*, in the Indian Ocean from Coringa Wildlife Sanctuary, India. *Iranian Journal of Ichthyology*, 10(1): 49-58.
- 35. Tudu, P.C., Pradhan, J., Ghosh, S. and Balakrishnan, S. 2023. Distributional range extension of Murex indicus Houart, 2011 (Gastropoda: Muricidae) to the eastern coast of India, Bay of Bengal. *Thalassas: An International Journal of Marine Sciences*, https://doi. org/10.1007/s41208-023-00606-w
- Varghese, T. and Girish Kumar, P. 2023. A Review of the Taxonomy, Biology and Distribution of the Social Wasps (Hymenoptera: Vespidae) of the Indian Subcontinent. *Journal of the Indian Institute of Science*, https://doi.org/10.1007/s41745-023-00411-7
- Wang, C., Jiang, L., Liao, L., Qu, Z., Kumar, S. and Hu, X. 2023. Taxonomic and phylogenetic studies on two marine Cyrtophoria ciliates (Protista: Ciliophora: Phyllopharyngea) with the description of a new species. Systematics and Biodiversity, 21(1): 2269150.

BOOK CHAPTERS

- Ramakrishna, Deepak, P. and Dinesh, K.P. 2023. Status of amphibian diversity in the Western Ghats. In: Pullaiah, T. [Ed.], Biodiversity Hotspot of the Western Ghats and Sri Lanka. Pp. 219–240. Published by CRC Press, Taylor and Francis Group.
- 2. Ramakrishna, Dinesh, K.P. and Deepak, P. 2023. Factors affecting diversity and distribution of animals in the Western Ghats Biodiversity hotspot. In: Pullaiah, T. [Ed.], *Biodiversity Hotspot of the Western Ghats and Sri Lanka*. Pp. 371–382. Published by CRC Press, Taylor and Francis Group.
- 3. Hassan, M.E., Banerjee, D., Saha, P.C. and Mukherjee, P. 2023. Insecta: Hemiptera: Auchenorrhyncha In: *Fauna of Assam* (Part-1). Pp. 396-429 (Published by the Director, Zool. Surv. India, Kolkata).
- 4. Hassan, M.E., Banerjee, D., Saha, P.C., and Pal, A. 2023. Insecta: Hemiptera: Heteroptera (Terrestrial) In: *Fauna of Assam* (Part-1). Pp. 430-495 (Published by the Director, Zool. Surv. India, Kolkata).

POPULAR ARTICLE

1. Kumar, A., Bharti, B. and Khan, I.A. 2023. Melody Over Canopy: Mellifluous Magpie! Unveiling the Secret Life of the Oriental Magpie Robin. SAEVUS Magazine, 36-45.

ABSTRACTS

- Siddique, A., Basu, S., Prasad, H., Bhowal, A., Changarangath, P.R. and Purushothaman, J. 2023. Morphological and molecular characterisation of swarm forming ghost jellyfish Cyanea *nozakii* Kishinouye, 1891 (Cnidaria: Scyphozoa). In: *7th International Jellyfish Blooms Symposium* (JBS7, 2023) - Jellyfish, Ecosystems and Humans.
- 2. Praveen Raj C., Prasad, H., Siddique, A., Bhowal, A., Purushothaman, J., Aparna, T. P. and George, A. 2023. Seasonal Dynamics and Environmental Influences on Planktonic Hydrozoan Populations in the Northern Bay of Bengal. In: 7th International Jellyfish Blooms Symposium (JBS7, 2023) Jellyfish, Ecosystems and Humans.
- 3. Praveen Raj C., Prasad, H., Purushothaman, J. and Parameshwaran, U. 2023. Kleptoparasitism and nursery habitats: An intriguing symbiotic association between Cyaneid jellyfish and Ophiocnemis Brittle Stars. In: 7th International Jellyfish Blooms Symposium (JBS7, 2023) Jellyfish, Ecosystems and Humans.
- Gokul, A. and Seth, J. K. 2023. Challenges and Opportunities to conserve the Brachyuran Crab Diversity in Sunderbans Biosphere Reserve. In: National Conference on Biological Sciences in the Post-genomic Era [3-4th November 2023], Berhampur University, Bhanja Vihar, Ganjam, Odisha, India. Abstract book p-27.
- 5. Mohapatra, S.K., Seth, J.K., Tripathy, B., Mohapatra, A. 2023. Resurrection of Lost DNA sequences of Cymothoid Isopods. In: *National Conference on Biological Sciences in Post-Genomic Era* (NCBSPGE-2023), Berhampur University, Berhampur. 03-04 November, 2023. Abstract book p-32.
- 6. Swain, S., Gawade, A.S. and Suman, D.S. 2023. An assessment of mosquito diversity from Koraput, Odisha using an indigenous and novel mosquito trap. In: *National Conference on Biological Sciences in the Post-genomic Era* (3-4th November 2023). Berhampur University, Bhanja Vihar, Ganjam, Odisha, India. Abstract book p-28.

MEETINGS ATTENDED

- Dr. Dhriti Banerjee, Scientist G, Director, ZSI, attended the Half-Yearly Progress Monitoring Committee 1. meeting of the ZSI, HQ's Office and Regional Centres conducted from 2nd November to 5th November 2023 at Desert Regional Centre, ZSI, Jodhpur to evaluate the Scientific, Accounts and Administrative Progress made during the period of 1st April to 30th September 2023 under the Chairmanship of Dr. K. Venkataraman, Former Director, ZSI and External Member Dr. Urmi Chatterji, Professor, University of Calcutta, highlighted the progress made by ZSI during the said period suggesting to maintain data on total collections, identified and unidentified figures year wise as per the format suggested by audit and mentioned the scientific work is the first criteria to showcase the work of ZSI in the global forum; attended the 4th meeting of SERB PAC Organismal and Evolutionary Biology – Animal Sciences (OEB-AS) during 8th and 9th November 2023 at Gujarat Biotechnology University, Gandhinagar, Gujarat, during the two-day meeting, about 80 proposals under PAC Organismal and Evolutionary Biology – Animal Sciences (OEB-AS) were received against February-March, 2023 call and shortlisted in screening meeting. Proposals transferred from other PACs under Life Sciences were evaluated by Director ZSI along with other committee members and external reviewers and provided detailed comments on the shortlisted proposal; attended a virtual meeting of National Institute for Research and Application of Natural Resources to Transform, Adapt and Build Resilience (NIRANTAR) on 9th November 2023 under the Chairmanship of DGF&SS, hosted by MOEF&CC; attended meeting with Dy. Controller of Accounts, MoEFCC and PAO/ZSI in ZSI, HQs on 14th November 2023 and matters regarding various bills and budgetary allocation under capital head were discussed; attended 18th Meeting of the Research Advisory and Monitoring Committee (RAMC) of ZSI at Udhagamandalam, the Nilgiris, Tamil Nadu on 17th and 18th November 2023 and visited to Theppakadu Elephant Camp in Mudumalai Tiger Reserve situated in the Nilgiri Biosphere Reserve on 19th November 2023 and met with the Reserve's officials; visited Southern Regional Center of the Botanical Survey of India (BSI-SRC), Coimbatore on 20th November 2023 and engaged in fruitful discussions with the BSI scientists; attended meeting with ICAR-National Bureau of Fish Genetic Resources (ICAR-NBFGR) at Kochi on 20th to 22nd November 2023 to have a detailed discussion on the training programme proposed to be organized at Kochi on Marine Fish Taxonomy as part of the MoU which was signed on 6th October 2023 with ICAR-NBFGR, Lucknow and visited their ICAR-NBFGR Kochi office; participated as the subject experts for the consultation on "Actioning Incentives for Biodiversity and Landscapes" held in Kathmandu, Nepal on 29th to 30th November 2023 representing MoEF&CC in the two-day workshop and multilateral meeting on the occasion. During the consultation, Dr. Dhriti Banerjee highlighted the importance of mainstreaming incentive measures into our programmatic actions and discussed how this can be done. She also provided overall guidance to various programmatic activities and participated in ICIMOD consultants. Deliberation was made mainly on identify areas for decision makers, government agencies, development practitioners, communities, and financial institutions to incentivize biodiversity positive, climate adaptive and sustainable development actions, including the scaling of Nature-based Solutions (NbS) with an aim to mitigate planetary crisis. "Incentive Matters for nature stewardship" is a tagline for a global campaign during the workshop to acknowledge and support aspirations and actions by local environmental stewards.
- 2. Dr. C. Raghunathan, Scientist F, ZSI, HQ, Kolkata, attended the Half-Yearly Progress Meeting (April to September 2023) held at DRC, ZSI, Jodhpur during 2nd to 5th November 2023 and served as the Member Secretary of the Scientific Committee; attended meeting on NIRANTAR chaired by the Director General of Forests and Special Secretary, MoEFCC on 9th November 2023; served as Member Secretary of 18th RAMC meeting of ZSI held at Udhagamandalam, the Nilgiris, Tamil Nadu during 17th and 18th November 2023; attended meeting at ICAR-NBFGR, Kochi to discuss the forthcoming National Conference on Advances in Fish Systematics: Morphological and Molecular Approaches being organized by ZSI in association with NBFGR at Hyderabad during January 2024; attended the Stakeholder meeting on "Ecosystem Services and Accounting Coringa Mangroves" held on 25th November 2023 at Kakinada organized by National Centre for Coastal Research, Ministry of Earth Sciences; attended the 3rd High Level Committee Meeting for Great Nicobar Island chaired by DG Forest through VC mode on 29th November 2023 and adjudicated the Ph.D. thesis on crop damage by birds for Barathidasan University and report submitted on 30th November 2023.
- Dr. G. Maheswaran, Scientist-F, ZSI, HQ, Kolkata, gave his expert comments on a set of questions sent to ZSI on one of the world's largest aviary being set up by Hyderabad Municipal Development Authority (HMDA) including exotic birds and how such a facility would create awareness about threatened animals

and birds both within India and outside on 15th November, 2023 and reviewed a project proposal for Goa State Research Foundation (GSRF) that gives small grants for students, faculty members on conservation of flora and fauna related projects in the state of Goa on 20th November, 2023.

- 4. Dr. Anil Kumar, Scientist-E, ZSI, NRC, Dehradun, attended the online meeting of ornithologists of AABI for the forthcoming 'Avian biology symposium' on 07th November, 2023.
- Dr. Anil Mohapatra, Scientist-E, ZSI, EBRC, Gopalpur, had participated in the meeting and trained the forest department front line workers on the management of Olive Ridley sea turtles during the preparatory meeting of Sea turtles organized by Chilika Forest Division on 29th November 2023.
- Dr. Aparna Kalawate, Scientist-E and Dr. S.S. Talmale, Scientist-C, ZSI, WRC, Pune, attended 2nd core Committee meeting (virtual) for the preparation of Goa State Biodiversity Action Plan (GSBSAP) organized by the Goa State Biodiversity Board on 3rd November 2023.
- Dr. Aparna Kalawate, Scientist-E, ZSI, WRC, Pune, attended Kundal Forest Academy meeting on 6th November 2023 on virtual mode on behalf of O/C, WRC, Pune and an online presentation and meeting to assess the academic proposals as an Animal Expert Committee member of the Maharashtra State Biodiversity Board on 26th October 2023.
- 8. Dr. Avtar Kaur Sidhu, Scientist-E, ZSI, HARC, Solan, attended Wildlife Board meeting of Ladakh on 24th November 2023 under the chairmanship of Honourable Governor of ladakh Brig. (Dr.) B. D. Mishra (Retd.)
- 9. Dr. Basudev Tripathy, Scientist-E, ZSI, WRC, Pune attended online meeting on Subject Specific Compliance Audit on the topic "Activities of Zoological Survey of India" on 27th November 2023.
- Dr. C. Sivaperuman, Scientist-E, ZSI, ANRC, Port Blair, along with Director, ZSI, visited the Centre for 10. Peninsular Aquatic Genetic Resources, National Bureau of Fish Genetic Resources, Kochi on 23rd November 2023 in connection with the MoU signed with NBFGR; Entomology Museum, Tamil Nadu Agricultural University, Coimbatore on 20th November 2023 in connection with the development of insect museum/interpretation centre in ANRC/ZSI and Botanical Survey of India, Southern Regional Centre, Coimbatore on 20th November 2023; organised and coordinated the18th Research, Advisory and Monitoring Committee meeting held during 17th & 18th November 2023 at Ooty, Tamil Nadu; attended Ph.D. Viva voce examination at Department of Ocean Studies and Marine Biology, Pondicherry University, Port Blair on 30th November 2023; meeting with Principal Chief Conservator of Forests & Addl. Principal Chief Conservator of Forests, Department of Environment and Forests, A & N Islands on 30th November 2023 as a part of compulsory training workshop on Natural Resource Management and Conflict Skills for Forest Management to be held during 6th - 8th December 2023 at Zoological Survey of India, Port Blair for the Indian Forests Service Officers; meeting with Shri. Keshav Chandra, IAS, Chief Secretary, Andaman and Nicobar Administration on 29th November 2023 as a part of compulsory training workshop on Natural Resource Management and Conflict Skills for Forest Management to be held during 6th - 8th December 2023 at Zoological Survey of India, Port Blair for the Indian Forests Service Officers, meeting with Shri. Devesh Chandra Srivastava, IPS, Director General of Police, Andaman and Nicobar Police on 29th November 2023 as a part of compulsory training workshop on Natural Resource Management and Conflict Skills for Forest Management to be held during 6th - 8th December 2023 at Zoological Survey of India, Port Blair for the Indian Forests Service Officers.
- 11. Dr. D.S. Suman, Scientist-E, ZSI, EBRC, Gopalpur, had participated in "Multistakeholder Consultation workshop to develop the State Action Plan for the Prevention and Control of Zoonotic Diseases for the state of Orissa" organized by Center for One Health of NCDC and Directorate of Public Health, Dept. of Health and Family Welfare, Orissa in technical collaboration with CDC on 21st and 22nd November 2023, Bhubaneswar, Odisha, in an online virtual meeting on 28th November 2023 for the further integration between ZSI & Integrated Disease Surveillance Programme (IDSP), MoFHW for database preparation on vectors and vector-borne diseases in India.
- 12. Dr. Deepa Jaiswal, Scientist E, ZSI, FBRC, Hyderabad, attended Andhra Pradesh Biodiversity Board meeting on 21st November, 2023.
- 13. Dr. Gaurav Sharma, Scientist-E, ZSI, NRC, Dehradun, participated in the "Janjatiya Gaurav Divas 2023" awareness rally and programme organized by Government of Uttarakhand at Parade Ground, Dehradun on 15th November, 2023; participated as expert member in the Project Evaluation Meeting organized by The Director, Uttarakhand Science Education and Research Centre, Government of Uttarakhand

24

on 16th and 17th November, 2023 and participated as Invited Guest in the "*Women Scientist Conclave 2023*" organized by The Director, Uttarakhand Science Education and Research Centre, Government of Uttarakhand, on 22nd November, 2023.

- 14. Dr. Gopal Sharma, Scientist-E, ZSI, GPRC, Patna, attended Half-Yearly Meeting of Senior Officer and presented the progress of GPRC, Patna on 2nd to 5th November, 2023 at DRC, Jodhpur.
- 15. Dr. K. A. Subramanian, Scientist E, ZSI, SRC, Chennai, represented ZSI in National Biodiversity Strategy and Action Plan organized by NBA at New Delhi on 28th and 29th November 2023.
- Dr. Mrinal Kumar Das, Scientist-D, ZSI, ANRC, Port Blair, served as observer for conduct of Trade Test for recruitment of Mazdoors in the Division of Working Plan, Department of Environment, and Forests on 3rd & 4th November 2023.
- 17. Dr. R.H. Raina Scientist- E, ZSI, DRC, Jodhpur, participated in the 9th meeting of the State Board for Wildlife of the Union Territory of Ladakh under the chairmanship of Brig. (Dr.) B.D. Mishra (Retd.), Hon'ble Lieutenant Governor of Union Territory of Ladakh through the virtual mode on 24th November 2023; attended in the *IUCN WBSG: Asia all members' meeting* on 29 November, 2023 through virtual mode.
- 18. Dr. Tamal Mondal, Scientist-D, ZSI, HQ, Kolkata, provided reply on Information desired by the Public Accounts Committee (PAC) during their study visit to Mumbai and Goa from 29/09/2023 to 04/10/2023 in respect of "Conservation of Coastal Ecosystems' based on C&AG Report No. 4 of 2022 as per the requirement of Ministry of Environment, Forest and Climate Change through ZSI/HQs on request; provided reply to Provisionally Admitted Unstarred Question for the Lok Sabha [Diary No. 275], on Bio-diversity Funds as per the requirement of Ministry of Environment, Forest and Climate Change through ZSI/HQs on request; provided reply to Provisionally Admitted Starred Question for the Lok Sabha [Diary No. 24], on Invasive species of Trees as per the requirement of Ministry of Environment, Forest and Climate Change through ZSI/HQs on request; provided reply to Provisionally Admitted reply to Provisionally Admitted Starred Question for the Lok Sabha [Diary No. 24], on Invasive species of Trees as per the requirement of Ministry of Environment, Forest and Climate Change through ZSI/HQs on request; provided reply to Provisionally Admitted Starred /Unstarred Question for the Rajya Sabha [Diary No. S1323], on Census of marine life as per the requirement of Ministry of Environment, Forest and Climate Change through ZSI/HQs on request; provided reply to Provisionally Admitted Starred /Unstarred Question for the Lok Sabha [Diary No. S1323], on Census of marine life as per the requirement of Ministry of Environment, Forest and Climate Change through ZSI/HQs on request; provided reply to Provisionally Admitted Starred /Unstarred Question for the Lok Sabha [Diary No. 161], on MoU for Cooperation in the field of Environment as per the requirement of Ministry of Environment, Forest and Climate Change through ZSI/HQs on request.

TRAININGS ORGANIZED

- A training programme on 'Identification of Scheduled Marine Species' was organized by MBRC, Chennai on 21st November 2023 for the Range Forest Officers of Tamil Nadu in collaboration with the Advanced Institute for Wildlife Conservation and Research, Vandalur, Chennai.
- 2. One-day training cum interactive sessions was conducted by MARC, Digha for the 45 trainee Forest Range Officers from Forest Academy of Administration and Management, Chandrapur, on 27th November, 2023.
- 3. One day training program was conducted by MARC, Digha, entitled "Impacts of pollution on Marine Fauna" for officials from West Bengal Forest Department on 4th November, 2023.
- 4. A two days workshop on vertebrate taxonomy was organized by NERC, Shillong with University of Science and Technology, Meghalaya on the 9th and 10th November.
- 5. A five days long Hands on training programme on Taxonomy, Ecology and Biodiversity of Diptera have been given to 5 post graduate students of Maulana Azad College, Department of Zoology by Officer in charge, staffs and research scholars of Diptera Section from 20th to 24th November, 2023.

TRAININGS ATTENDED

- 1. Dr. Jasmine P, Scientist-E, ZSI, HQ, Kolkata, attended the training programme of R programming for marine and Fisheries Data management from 13th to 17th November 2023 at CUSAT, Kochi; attended one symposium and presented three posters during the 7th International Jellyfish Blooms Symposium (JBS7, 2023) Jellyfish, Ecosystems and Humans, from 21st to 24th November, 2023.
- 2. Dr. M. E. Hassan, Scientist-E, ZSI, GPRC, Patna, attended National Symposium organized by Dept. of Zoology, Patna University on 30th November 2023.

LECTURES DELIVERED

- 1. Dr. C.Raghunathan, Scientist - F, ZSI, HQ, Kolkata delivered a lecture on 'Coringa Mangroves-Biodiversity and Ecosystem Services' in the Stakeholder meeting on "Ecosystem Services and Accounting - Coringa Mangroves" held on 25th Nov 2023 at Kakinada organized by National Centre for Coastal Research, Ministry of Earth Sciences; provided Reply for the Lok sabha Starred Dairy no.24 due for answer on 04/12/2023 on Invasive Species of Trees sent to Ministry on 29th November 2023; the reply for Rajya Sabha question Dairy No, S1323 on Census of Marine Life has been submitted to the Ministry on 29th November 2023 and the reply for Lok Sabha unstarred question Dairy No. 161 regarding MoU for Cooperation in the field of Environment has been sent to the Ministry on 30th November 2023.
- Dr. P. C. Pathania, Scientist-E, ZSI, HARC, Solan, acted as 'Guest of Honour' in the Talent Expo, 2023 exhibition programme in the R.S. Model Senior Secondary School, Shastri Nagar, Ludhiana, Punjab on 04th November, 2023; delivered an invited talk on the topic "Role of Biopesticides in management of Insect-pest of North-West Himalaya" in the training programme organized by the ICFRE-Himalayan Forest Research Institute, Shimla on 24th November, 2023
- Dr. D.S. Suman, Scientist E, ZSI, EBRC, Gopalpur, delivered a lecture on "Mosquito diversity, vectors and species complexity" (online mode) at Lovely Professional University, Phagwara, Punjab on 20th November 2023.
- Dr. Anil Mohapatra, Scientist E, ZSI, EBRC, Gopalpur, delivered a invited lecture on "DNA barcoding A bliss or curse for the Taxonomists?" for the student of Department of Biotechnology, Khalikote University on 30th November, 2023
- 5. Dr. Sandeep Kushwaha, Scientist-C,ZSI, CZRC, Jabalpur, delivered a lecture on Collection, Preservation and

Identification to the students of Rani Laxmibai Institute of Education, Jabalpur.

- Dr. Indu Sharma Scientist- E, ZSI, DRC, Jodhpur, delivered a lecture on "Introduction of the Zoological Survey of India and Taxonomic Importance & conservation of Fauna" among the students of Sri Aurobindo Centre of New Education, Jodhpur on 29th November 2023 at the centre.
- Dr. R H Raina Scientist-E, ZSI, DRC, Jodhpur, delivered Invited Lecture on the topic of "Conservation of faunal diversity in Marwar Region of Rajasthan with special reference to agriculture" at College of Agriculture, Baytu, Barmer Rajasthan on 30th November 2023.
- Dr. Sreeraj C.R., Scientist-D, WGRC, Kozhikode, delivered a lecture on the topic "Curious Minds" to the selected high school students of Kozhikode district as part of the programme organised by District Science Club, Kozhikode on 10th November 2023 and a lecture to the B.Sc. Zoology students of Silver Arts & Science College, Perambra, Kozhikode on 21st November 2023.
- Dr. C. Sivaperuman, Scientist-E, ZSI, ANRC, Port Blair, delivered a talk on an overview of Antarctica for the trainees of the refresher course in Environmental Sciences, organised by Malaviya Mission Teacher Training Centre, Madurai, Kamarajar University, Madurai on 27th November 2023.
- Dr. Gaurav Sharma, Scientist-E, ZSI, NRC, Dehradun, delivered lecture on "Status of Faunal Diversity of India" to the students and faculty of Lachoo College, Jodhpur, Rajasthan on 04th November, 2023.
- Dr. Md. Jafer Palot, Scientist-C, ZSI, WRC, Pune, delivered a lecture on the "Importance of Western Ghats" to the National Service Scheme volunteers of Vocational Higher Secondary School, Sreekandapuram, Kannur district, Kerala at the Aralam



Wildlife Sanctuary on 25th October 2023.

- Dr. Aparna Kalawate, Scientist-E, ZSI, WRC, Pune, delivered a lecture on Biodiversity and conservation to class 8th students of PM Shri Kendriya Vidyalaya No. 1, Dehu Road, Pune on 25th November 2023 under one day workshop.
- Dr. K. P. Dinesh, Scientist-E, ZSI, WRC, Pune, delivered a series of two lectures related to 'Tools and techniques in Integrative Taxonomy' for the PhD course work students at Zoology Department, Savitribai Phule Pune

University on 21st October 2023.

- 14. 14. Dr. Souvik Sen, Scientist-D, ZSI, HQ, Kolkata, delivered a lecture' on 'Arachnids' for the UG & PG students of Department of Zoology, Serampore College, West Bengal on 23rd November 2023.
- 15. Mr. Praveen Raj C (JRF under Dr. Jasmine P.) of the section presented three posters during the 7th International Jellyfish Blooms Symposium (JBS7, 2023)
 Jellyfish, Ecosystems and Humans from 21st to 24th November, 2023.













Dr Dhriti Banerjee, Director, ZSI attended the 4th meeting of SERB PAC Organismal and Evolutionary Biology – Animal Sciences (OEB-AS) during 8th and 9th November 2023 at Gujarat Biotechnology University, Gandhinagar, Gujarat.





18th Meeting of the Research Advisory and Monitoring Committee (RAMC) of ZSI was held at Udhagamandalam, The Nilgiris, Tamil Nadu on 17th and 18th November 2023.





Releasing ZSI Calendar 2024 in the presence of Dr. Bharati Pravin Pawar, Honorable Minister of State, Ministry of Health and Family Welfare, Govt of India, Dr. Nandita Chatterjee, IAS, Adviser, UN and Scientists of ZSI at Theppakadu Elephant Camp, Madumalai Tiger Reserve, Tamil Nadu.



Director ZSI visited Southern Regional Center of the Botanical Survey of India (BSI-SRC), Coimbatore on 20th November 2023 after completion of RAMC meeting, engaging in fruitful discussions with the BSI scientists.





Meeting with National Bureau of Fish Genetic Resources (NBFGR) at Kochi on 20th to 22nd November 2023 to have a detailed discussion on the training programme proposed to be organized at Kochi on Marine Fish Taxonomy as part of the MoU which was signed on 6th October 2023 with NBFGR, Lucknow and visited their ICAR-NBFGR Kochi office.

31





Dr. Dhriti Banerjee, Director, Zoological Survey of India represented Ministry of Environment, Forest & Climate Change participating as a subject expert consultation in the two-day workshop and multilateral meeting on the "Actioning Incentives for Biodiversity and Landscapes" held in Kathmandu, Nepal on 29th and 30th November 2023 organised by International Centre for Integrated Mountain Development (ICIMOD)