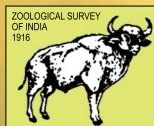


ZSI E-News

Monthly E-Newsletter from Zoological Survey of India

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From The Director's Desk



Cover:

Ratufa indica (Erxleben, 1777);
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I am pleased to state that ZSI is organizing the *Animal Taxonomy Summit 2023* from 1st to 3rd July 2023 and the portal www.zsi.org.in is available for larger benefit of taxonomists across the globe. The capacity building workshop on implementation of CITES has been hosted by ZSI for regulating animal and plant trade in India in which senior forest officials from State Governments were participated. Various awareness programmes on Mission LIFE have been organized by ZSI Headquarters and Regional Centres on themes, save water, save energy, go green, adopt millets etc. ZSI received the Special Recognition Award at Pride of India Expo, an exhibition themed on the importance of animals and their role in the Ecosystem held in Pune during the Indian Science Congress. Faunistic surveys conducted to Andaman and Nicobar Islands, Bihar, West Bengal, Himachal Pradesh and Golden Quadrilateral Highway covering different states to assess the faunal diversity. Altogether 14275 specimens comprising 1528 species including 13 new species and 11 new records to India were identified. As a part of molecular studies, 146 DNA barcodes have been generated and uploaded in BOLD. The facilities of ZSI at headquarters and Regional Centres were visited by 21760 persons in including researchers, students and general public at large. 74th Republic Day of the country was celebrated befittingly at all the ZSI offices across the country by unfurling the National Flag.

Dr. Dhriti Banerjee

Kolkata

3rd February 2023

Headquarters, Kolkata

A web portal on Animal Taxonomy Summit 2023 to be organized by ZSI from 1st– 3rd July 2023 has been launched by Dr. Dhriti Banerjee, Director, ZSI on the occasion of 74th Republic Day celebration at ZSI Headquarters. A month long orientation programme on Beyond Taxonomy has been organized for the newly recruited Senior Zoological Assistants by delivering several lectures on the different thematic areas. ZSI hosted the Capacity Building Workshop on Implementation of Provisions of CITES organized by MoEFCC on 20th January 2023 at Kolkata for formulating a road map with delegates for forthcoming CITES Conference of Parties meeting for the benefit of senior officials of State Forest Departments as well as scientific authorities of CITES in India. Another capacity building workshop for 40 frontline staff of West Bengal Forest Department for identification of scheduled animals has been organized by ZSI from 16th to 17th January 2023. Altogether 7319 specimens comprising 1715 species under different faunal groups have been identified. Among them one species each under Orthoptera and Collumbola were turned out as new to science while 42 species were augmented first time to the National Zoological Collections. Provided the comments to Statistics Division, MoEFCC on National State of Environment Report 2020-21: Biodiversity and Wildlife prepared for MoEFCC by TERI. Replies for Rajya Sabha Q.Dy.No. S 538 regarding “Extinct Wildlife Species in Rajasthan” due for reply on 02.02.2023 and Rajya Sabha Starred/unstarred Question Dy.No.



Republic Day celebration at Headquarters, Kolkata

U1390 regarding ‘Bird Census’ due for answer on 09.02.2023 were submitted to the Ministry. Surveys were conducted in Middle Andaman, the Golden Quadrilateral Highway and Wild life Sanctuaries of West Bengal during the month. As mandated by DoPT, Career progression training for Senior Zoological Assistants are underway at ZSI headquarters in which the eligible scientific staff from ZSI headquarters as well as Regional Centres are getting benefitted. Dr. Souvik Sen, Scientist-D received the ‘Best Participant Award’ in a National online workshop on ‘Ecological Paradigms - an Applied Perspective (Phase I- Ecosystem)’ organized by the Zoological Society, Kolkata.





Intermediate horseshoe bat
Rhinolophus affinis Horsfield

North Eastern Regional Centre, Shillong, Meghalaya

Total 57 species were identified belonging to Hemiptera, Amphibia, Pisces, Mammals and Reptiles. Under the Mission LIFE, a water conservation awareness activity was organized on 23rd January 2023 at Lamlyer, Mawrykneng, East Khasi Hills and a rally was organized to create awareness on ban on plastic of less than 120 micron on 25th January 2023. Republic Day was celebrated on 26th January, 2023. Advisory service rendered to Don Bosco University regarding some distribution information and pattern vis-à-vis potential impacts of climate change on anuran amphibians of Khasi Hills region. One fish species (*Bangana dero*) was identified for North Eastern Hill University, Shillong.

Western Regional Centre, Pune, Maharashtra

Three surveys have been conducted during the month to Bhagwan Mahaveer Sanctuary and Mollem National Park, Goa from 16th to 24th January, 2023, Jogimatti Wildlife Sanctuary and Uttaregudda Wildlife Sanctuary, Karnataka from 15th to 21st January 2023. Altogether 72 species belonging to Decapoda, Coleoptera and Lepidoptera was identified. Identification and advisory services provided to Probationary Police Sub Inspector, Maharashtra on tanned skin and antlers, to the Range Forest Officer, Maharashtra, on tanned skin, to Shri Rohit Mohite, Maharashtra on python and to Range Forest Officer, Maharashtra on Reptilia and also to Thiru Kolanjiappar Government Arts College, Tamil Nadu on freshwater crabs. Nine sequences (mt 16S rRNA) of reptilian samples from the Western Ghats

have been submitted. A book entitled, Corona kalathoru Vavval (Bats of Kerala in Malayalam) authored by Dr M.J. Palot, Scientist-B has been awarded by the Kerala Council for Science, Technology, and Environment (KCSTE), Government of Kerala under the category of best science book for children. Participated and show cased the faunal diversity and publications to the visitors at the “Shining Maharashtra” exhibition held at Akulj, Solapur district, Maharashtra from 22nd to 24th December 2022. Participated and show cased the faunal diversity and publications to the visitors in “108th Indian Science Congress and Pride of India-Frontier Science & Technologies Mega Expo held at R.T.M. Nagpur University, Nagpur from 5th to 7th January 2023.



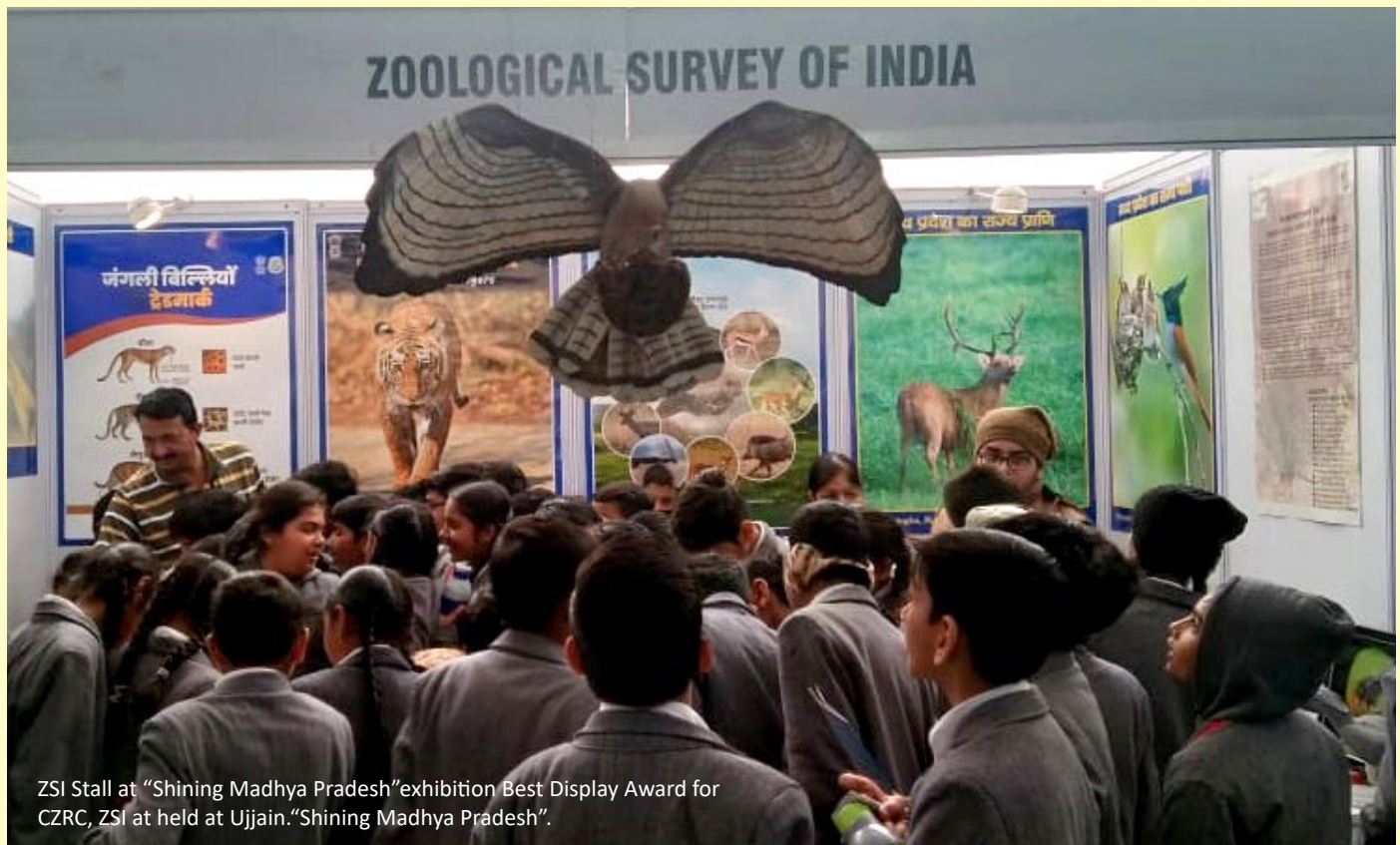
Republic Day Celebration 2023



Mangrove crab, *Neosarmatium malabaricum* (Henderson, 1893)

Central Zone Regional Centre, Jabalpur, Madhya Pradesh

CZRC, ZSI received the Best Display award for stall at “Shining Madhya Pradesh” Exhibition at Ujjain, M.P. Scientists of the Centre identified 98 species belong to order Orthoptera, Lepidoptera and Hemiptera and Phylum Mollusca and Pisces. Organized one debate competition under Mission LIFE awareness programme on the theme “Water conservation” among the Students on 13.01.2023. All Officers and staffs of CZRC, ZSI along with the students of BSc. Zoology of Modern Science College took pledge on Lifestyle for Environment under the awareness program of Mission LIFE on 13.01.2023. 74th Republic day was celebrated on 26th January 2023. All Officers and Staffs participated in the cleaning drive of Computer Lab room under Swachata 2.0 Activity on 27.01.2023. Identification services provided to Fergusson College, Pune on Orthoptera and to SFRI, Jabalpur on Mollusca.



ZSI Stall at “Shining Madhya Pradesh” exhibition Best Display Award for CZRC, ZSI at held at Ujjain. “Shining Madhya Pradesh”.

Desert Regional Centre, Jodhpur, Rajasthan

Thirty eight species containing 5 species of Gastropoda, 26 species of insects 1 species of Decapoda and 6 species of Pisces were identified during the month. Rallies conducted on Conserve Water # Choose Life on 18.01.2023 to highlight the importance of water resources and their utilization among the local people. Republic Day was celebrated on 26.01.2023. Identification and Advisory Service rendered to Government Degree College, Jhalawar, Rajasthan on Coleoptera and Hemiptera.



Mission Life activities celebrated at DRC, Jodhpur



Motacilla citreola (Pallas, 1776)

Northern Regional Centre, Dehradun, Uttarakhand

Scientists of the centre identified 80 species belongs to 07 faunal groups i.e., Protozoa, Phthiraptera, Lepidoptera, Hymenoptera, Pisces, Amphibia and Reptilia. Centre organized and celebrated “Mission Life programme” on 4th January, 11th January and 13th January, 2023 and celebrated Republic Day on 26th January 2023. Scientists of the Centre evaluated Ph. D. Thesis received from Deemed University, FRI, Dehradun.



Hands-on training on animal taxonomy

Southern Regional Centre, Chennai, Tamil Nadu

The scientists of this Centre discovered five species of genus *Thraululus* (Ephemeroptera: Leptophlebiidae) viz., *Thraululus amravati* Vasanth, Subramanian & Selvakumar, 2022, *Thraululus cuspidatus* Vasanth, Subramanian & Selvakumar, 2022, *Thraululus malabarensis* Vasanth, Subramanian & Selvakumar, 2022, *Thraululus plumeus* Selvakumar, Vasanth & Subramanian, 2022 and *Thraululus vellimalaiensis* Vasanth, Subramanian & Selvakumar,

2022 from different regions of India. A total of 180 species from Ephemeroptera, Odonata, Lepidoptera, Plecoptera, Mollusca, Rotifera, Cladocera, Rhizopoda, Ostracoda, Amphibia and Reptiles were identified during the month. A field faunal survey was conducted along the proposed greenfield highway between Palakkad and Kozhikode. The scientist reviewed the manuscript for an SCI journal.



Netta rufina (Pallas, 1773)

Gangetic Plains Regional Centre, Patna, Bihar

Conducted one faunistic survey to Bihar from 30.01.2023 to 09.02.2023. 45 species were identified during the month. Organised an online webinar on Water Conservation under Mission LIFE program on 24.01.2023. The 74th Indian Republic day was celebrated on 26.01.2023. A mass awareness campaign on Water Conservation was organised by GPRC ZSI Patna on 13.01.2023 at the Eco Park Patna under Mission LIFE Programme.



Riptortus pedestris (Fabricius, 1775)

High Altitude Regional Centre, Solan, Himachal Pradesh

Sixty faunal species were identified from insects (Lepidoptera and Trichoptera) and Pisces. Organized awareness rally in the village Deothi to prohibit the use of single use plastics and conserve water and energy. Centre celebrated the National Voters' Day and taken pledge on 25-01-2023 and organized the Republic day

Flag unfurling ceremony on 26-01-2023. Identification and Advisory Service rendered to Punjabi University, Patiala; Punjab Agricultural University, Ludhiana; School of Agricultural Sciences and Rural Development (SASRD), Nagaland University on Lepidoptera and 3 manuscripts for various journals reviewed.



Awareness programme for Mission Life organised at village Deothi



Andaman And Nicobar Regional Centre, Port Blair

Dr. C. Sivaperuman, Scientist-E & Officer-in-Charge, Zoological Survey of India, Andaman and Nicobar Regional Centre, Port Blair has received the highest award of Lt. Governor's Commendation Certificate for exemplary contribution in Biodiversity Conservation Andaman and Nicobar Islands on 26th January 2023. One



Andaman Green Pigeon [*Treron chloropterus* (Blyth, 1846)]

long term survey has been conducted to Great Nicobar Islands during 8th to 31st January and 21 days local field surveys were conducted to South Andaman. A total of 243 species were identified comprised of Fishes (31 species); Mollusca (20 species); from the marine

environment; Amphibia (1 species); Lepidoptera (45 species); Birds (79 species); Arachnida (52 species); Reptilia (7 species) Odonata (7 species) scorpions (1 species) and 3 specimens of confiscated Mollusca were identified for the Department of Environment & Forests, Andaman & Nicobar Islands.



Dr. C. Sivaperuman receiving Lt. Governor's Commendation Certificate

Sunderban Regional Centre, Canning, West Bengal

One survey tour was conducted from 15th to 25th January 2023 along the Odisha and Andhra Coast. During the survey trip, Whale sharks were documented from the Chinthapalli reef, Andhra Pradesh coast. A total of 55 species were identified, among them 41 spp. of mollusca, 14 spp. of fishes. Two programs were organized in two different schools under the MISSION LIFE program on 11th & 20th January 2023.



Lotoria triangularis (Perry, 1811)



Celebration of Mission Life

Freshwater Biology Regional Centre, Hyderabad, Telangana

The scientists, staff and research scholars of the centre identified 21 species of Aquatic Coleoptera, 20 species of Aquatic Hemiptera, 3 species of Ostracoda, 10 species of Branchiopoda, 12 species of Mollusca, 8 species of Reptilia, and 17 species of fishes during the month of

January. 18 sequences have been submitted to NCBI. A stall was organized in collaboration with Gowtham Model School to generate awareness among general public and students regarding conserving water and wetland fauna as a part of Mission Life program.



Macaca radiata (É. Geoffroy, 1812)



Yungipicus nanus (Vigors, 1832)

Western Ghat Regional Centre, Kozhikode, Kerala

Seventeen species of Tenebrionidae (Coleoptera) were newly recorded from Meghalaya. 10 species belonging to various families of Hymenoptera are reported from seven different states/ UTs of our country. Survey was conducted from 23.01.2023 to 01.02.2023 at Idukki district, Kerala. Total 11 species of Coleoptera, 1 species of Dermaptera and 22 species of Hymenoptera were identified. The Republic Day was celebrated in the Centre with full fervor on 26th January, 2023. One exhibition gallery was set up on behalf of Edakkeppuram Fest in collaboration with Youth Voice, Edakkeppuram on 14-15 January, 2023 and one day Hands-on Training workshop on Animal Taxonomy was organized on 14th January, 2023 for school and college students at Edakkeppuram UP School, Kannapuram, Kannur district, Kerala. One invited

lecture on Cyber-forensics by Dr. P. Vinod Bhattathiripad was organized in the Centre on 18th January, 2023. Identification services provided to Punjab Agricultural University, Ludhiana and ZSI, Solan on Hymenoptera. Necessary information was provided to Superintendent of Customs (Preventive), Air Intelligence Unit, Cochin International Airport, regarding the identification of horns of wild animal. One research manuscript on Hymenoptera (Pteromalidae) reviewed for Journal of Asia Pacific Entomology.



Boletoxenus taprobanae
(Lewis, 1894)

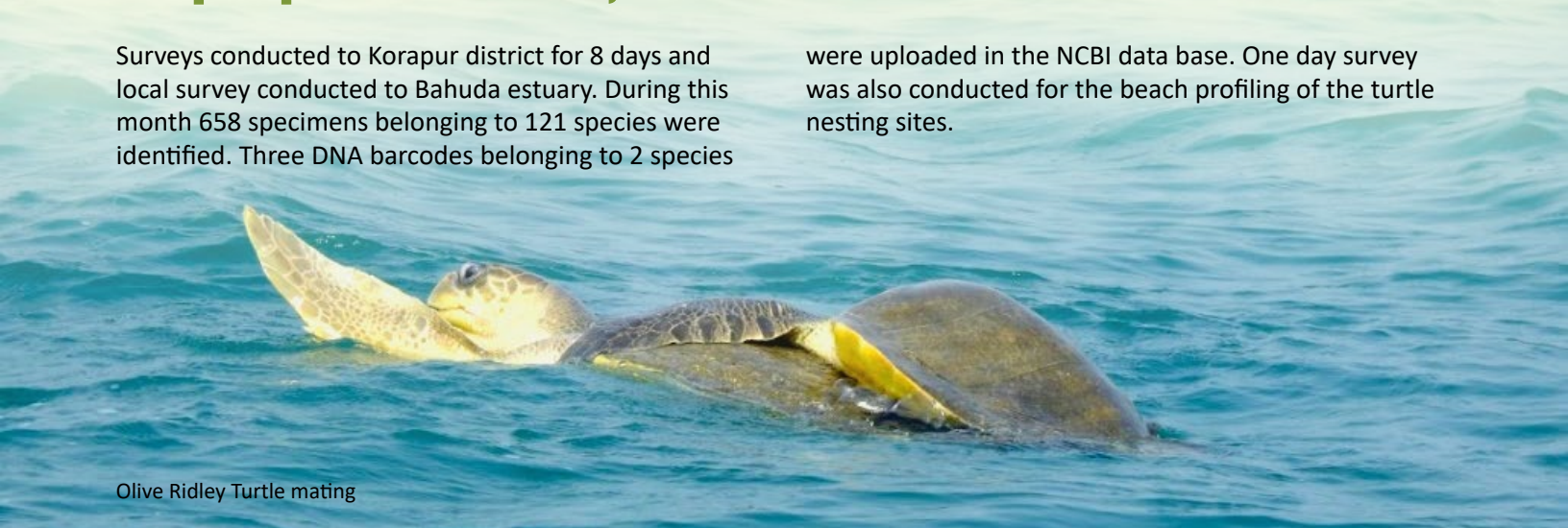


Ceratina bryanti
Cockerell, 1919

Estuarine Biology Regional Centre, Gopalpur-On-Sea, Odisha

Surveys conducted to Korapur district for 8 days and local survey conducted to Bahuda estuary. During this month 658 specimens belonging to 121 species were identified. Three DNA barcodes belonging to 2 species

were uploaded in the NCBI data base. One day survey was also conducted for the beach profiling of the turtle nesting sites.



Olive Ridley Turtle mating

Arunachal Pradesh Regional Centre, Itanagar

A total of 64 species: Lepidoptera 38 spp. Orthoptera 10 spp., Pisces 10 spp., Amphibia 05 spp. and Reptilia 01 sp. were identified by the Scientists and Research Scholars of the Centre. One day survey was conducted to Sopo village, Doimukh. An awareness campaign on LiFE- Creative on Conservation of Water was organized on Friday, 27th January, 2023. All Officers and staff of the APRC, Itanagar celebrated 74th Republic Day, 2023 at office campus by unfurling the National Flag.



Local survey at Sopo

Marine Aquarium and Regional Centre, Digha, West Bengal

Scientists of this Centre identified a total of 188 species belonging to Fishes 93 spp., Mollusca 48 spp., Polychaete 10 spp., Crustacea 30 spp., Echinodermata 04 spp. and Cnidaria 03 spp. 05 days [2nd – 6th January 2023] survey was conducted at Khadibil Mangroves, Subarnarekha Estuary, Odisha. Five days local survey



74th Republic Day Celebration at ZSI, MARC

was conducted in Digha. Total 41 live specimens released in the aquarium for public view. Total 22 educational institutions from West Bengal, Odisha, Assam, UP etc. visited the Marine aquarium for the month as part of educational tour. 74th Republic Day 2023 was celebrated on 26th January 2023. As a part of Swachh Bharat Mission and Special Campaign 2.0, MARC staff members actively participated in the cleaning of various parts of MARC on January 10, 2023. MARC. Conducted awareness programme to prohibit the use of single use plastics and conserve water and energy on January 13, 2023 as a part of Mission Life initiative. Scientist of the Centre evaluated one DST, SERB, CRG Project.



Charybdis feriata (Linnaeus, 1758)

New Discoveries and New Records

New Species



Thraulius plumeus Selvakumar, Vasanth & Subramanian, 2022



Thraulius amravati Vasanth,
Subramanian & Selvakumar, 2022



Thraulius cuspidatus Vasanth,
Subramanian & Selvakumar, 2022



Thraulius vellimalaiensis Vasanth, Subramanian & Selvakumar, 2022



Thraulius malabarensis Vasanth,
Subramanian & Selvakumar, 2022



Publications

POPULAR ARTICLES

1. Palot, M.J. 2023. *Vana Samrakshanavum Sannadha Sangadankalum (About Environmental NGOs of Kerala) Malabar Natural History Society. Aranyam, A magazine of Kerala Forests & Wildlife Department, Govt. of Kerala, 43(4): 36–38.*

Papers

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3. Anagha, S., Girish Kumar, P. & V.D. Hegde. 2023. A study of the genus *Chalybion* Dahlbom, 1843 (Hymenoptera, Sphecidae) in India. *Journal of Insect Biodiversity and Systematics*, 9 (1), 59–66.
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8. Bharti, D., Kumar, S., Buonanno, F., Ortenzi, C., Montanari, A., Quintela-Alonso, P., La Terza, A. 2022. Free living ciliated protists from the chemoautotrophic cave ecosystem of Frasassi (Italy). *Subterranean Biology*. 44: 167–198.
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Book Chapters

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3. Prasad, H., Bhowal, A., K. K. Jasheeda., N. J. H. Treesa., Purushothaman, J., Ch. Satyanarayana. 2022. Plankton population dynamics in Gulf of Kutch during the spring intermonsoon of 2022. In: Two-Day International Conference Zoospectra 2022.

Meetings Attended

- 1. Dr. Dhriti Banerjee**, Director, Zoological Survey of India, delivered a lecture on Beyond Taxonomy in Orientation Programme for newly joined Sr. Zoological Assistant in ZSI on 2nd Jan., 2023; served as Chief Guest in the Valedictory program of Women Science Congress at 108th India Science Congress, Nagpur from 3-7th Jan. 2023 held at Rashtrasant Tukadoji Maharaj Nagpur University (RTMNU); shared the stage with Nobel laureate, Ada E. Yonath, who won the Nobel Prize in Chemistry in 2009 who was present on the occasion as a special guest; led the women scientists at ISCA along with team of scientists of ZSI visited the Pride of India, S&Ts Mega Expo, Exhibition themed on the importance of animals and their role in the Ecosystem; attended the final proposal evaluation meeting of the Project Advisory Committee (PAC) on Organismal and Evolutionary Biology (OEB) - Animal Sciences during 10-11 Jan., 2023 at BITS Pilani, Goa Campus; delivered a lecture in the valedictory session on 13th Jan. 2023 for a one-month Training and Skill Internship (VRITIKA) on Taxonomy, diversity and seasonality of coastal microzooplankton (Marine Protozoans) assemblages from the Indian waters from 15th Dec. 2022 to 13th Jan. 2023 at ZSI HQs, Kolkata sponsored by Accelerate Vigyaan Scheme, DST, New Delhi; addressed a Capacity Building Workshop for 40 frontline staff of West Bengal Forest Dept. on identification of scheduled animals on 16th and 17th January. 2023; attended GLIS meeting on 17th Jan. 2023; addressed inaugural session of Capacity Building Workshop on Implementation of Provisions of CITES organised by MoEFCC on 20th Jan. 2023 at Hayatt Regency, Kolkata, and formulated a road map with delegates for forthcoming CITES Conference of Parties meeting; attended MoEFCC meeting on Reviews on Expenditure & Budget on 23rd Jan. 2023; remembered Netaji Subhas Chandra Bose on his 125th birth anniversary celebration as “Parakram Diwas” on 23rd Jan. to honour his boundless courage & valour; addressed Inaugural session of Career Progression mandatory for SZA from 24th Jan. 2023 to 10th Feb. 2023; introduced a system of “Suggestion Box” in ZSI HQs office; launched a web portal on 74th Republic Day for Animal Taxonomy Summit 2023 to be held at Kolkata from 1-3rd July 2023, and awareness was made on save water @Mission LiFE to the trainees of CPMT on Republic Day.
- 2. Dr. C. Raghunathan**, Scientist- F, attended the 37th Meeting of the National Committee on Introduction of Exotic Aquatic Species convened by Department of Fisheries, Ministry of Fisheries, Animal Husbandry and Dairying on 2nd January 2023 through virtual mode; attended the meeting for PMU-TechDome content organized by C-DAC, Pune on 5th January 2023; held meeting with CPWD officials at APRC, Shillong on 6th and 7th January 2023 to submit the preliminary estimate for construction of Himalayan Faunal Repository and Renovation and refurbishment of office and residential buildings of APRC, revised the project proposals on Translocation of Corals and Monitoring of intertidal fauna in Great Nicobar Island and submitted to the ANIIDCO on 20th January 2023; reviewed the survey tour report on Jellyfishes and submitted the report; assessed the presentations of Sr. Zoological Assistants made in different topics such as SDG, Biodiversity Conservation, Resistance and Resilience and Invasive species, delivered the talk on the Microzooplankton during the valedictory session of one-month long Training and Skill Internship (VRITIKA) on Taxonomy, Diversity and Seasonality of Coastal Microzooplankton (Marine Protozoans) assemblages from the Indian waters held at ZSI on 13th January 2023, chaired the fact finding committee meeting held on 19th January 2023 as required by National Commission for Schedule Tribe for the department related matters; necessary clarifications have been provided to ANIIDCO regarding NGT case, challenging EC, CRZ and FC clearance for holistic development of Great Nicobar Island; attended the Capacity building workshop on implementation of CITES organized by MoEFCC and hosted by ZSI on 20th January 2023 at Hyatt, Kolkata and summed up the programme on the occasion; evaluated the Ph.D. thesis for Meenakshi Institute of Higher Education and Research, Chennai and report submitted on 23rd January 2023; comments of ZSI provided to Statistics Division, MoEFCC on National State of Environment Report 2020-21: Biodiversity and Wildlife prepared for MoEFCC by TERI on 24th January 2023; reply for the Rajya Sabha Q.Dy.No. S 538 regarding “Extinct Wildlife Species in Rajasthan” due for reply on 02.02.2023 has been prepared and sent to MoEFCC.

3. **Dr. V.D. Hegde**, Scientist-E, WGRC attended Kerala state 1st Wildlife Board meeting (online) convened by PCCF, Kerala on 19 January, 2023.
 4. **Dr. Gopal Sharma**, Scientist E , GPRC, Patna participated in the online preparatory meeting of Asian Water Birds Census 2023 on 14th January 2023, organised by Department of Environment, Forest and Climate Change, Govt. of Bihar; participated in the Sahitya Samagam on 24th January 2023 at Gyanpith Sabhagar, Mahatma Gandhi Nagar, Patna.
 5. **Dr. C. Sivaperuman**, Scientist-E & Officer-in-Charge, ANRC, ZSI attended meeting under the Chairmanship of PCCF, ANI in connection with the proposed Crocodile Census in Andaman and Nicobar Islands on 6th January 2023; attended the function as part of celebration of Azadi ka Amrit Mahotsav under the Chairmanship of Hon'ble Union Home Minister and Minister of Cooperation, Shri. Amit Sha Jit on 23rd January 2023 at Netaji Stadium, Port Blair.
 6. **Dr. Souvik Sen**, Scientist-D participated in the 108th Indian Science Congress held at R. T. M, Nagpur University, Nagpur, Maharashtra from 2nd January to 07th January 2023.
 7. **Dr. Anjum N. Rizvi**, Scientist-E, participated in Pride of India Mega Expo of Indian Congress held at Nagpur from 3-7th January 2023.
 8. **Dr. Ramesh kumar**, Scientist-D, has participated and presented the paper on the 07th National Conference on Biological Control on 75 Years of Biological Control of Pests and Diseases in Agriculture: Challenges and the Way Forward held at Bengaluru between 15th and 17th December 2022.
 9. **Dr. Indu Sharma**, Scientist-E and Dr R. Bano, Scientist-E participated in the NARKAS committee meeting organized by CAZRI about the progress of Hindi.
 10. **Dr. Basudev Tripathi**, Scientist-E and O/C, and Dr. A. S. Kalawate, Scientist E attended G20 Summit: Jan Bhagidari Event: Lecture on 'Making Cities Future Ready' on 14th January 2023 with the Vice Chancellor, Savitribai Phule Pune University, Pune and other organizations.
 11. **Dr. M.J. Palot**, Scientist-B attended the review meeting at Van Bhavan, Altinho, Panaji, Goa on 6th January 2023 and presented the progress of the project before the Committee.
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Trainings Organized

1. ZSI, HQ organized Capacity Building Workshop for 40 frontline staff of West Bengal Forest Dept. on identification of scheduled animals on 16th-17th Jan. 2023.
2. Dr. Jasmine, P. Protozoology section organised the High Skill Internship programme of Vrithika on 'Taxonomy, Diversity and Seasonality of Coastal Microzooplankton (Marine Protozoans) assemblages from the Indian waters' from 15th Dec 2022 to 13th January 2023 for 5 students from various universities sponsored by the Accelerate vigyan scheme of DST.
3. WGRC Kozhikode organized 3 days Orientation programme to III Semester M.Sc. Applied Zoology students of University of Calicut at ZSI-WGRC, Kozhikode from 11-13 January, 2023.
4. One training program organised by CZRC, Jabalpur for the Students of BSC. 2nd year of Government Modern Science College, Jabalpur provided with the details regarding the museum specimens and collection and preservation methods practiced from 10.01.2023 to 16.01.2023.
5. Dr U. Saikia, Sci- D of NERC, Shillong provided a preliminary hands on training on bat taxonomy to Dr. D. Lyngdoh, Asst. Prof. Of Zoology and two students of St. Anthonys College, Shillong between 18-20th January, 2023.
6. DRC, Jodhpur organized an International Conference in collaboration with Shobhasaria Group of Institute Sikar at Sikar Rajasthan on "SCITECHCON-2023, An International Conference on Emerging Challenges, their Solutions and Recent Advances in Science and Technology" at Sikar, Rajasthan.
7. Dr. Gaurav Sharma, Scientist-E and Officer-in-Charge of NRC,ZSI organized training programme on the topic entitled "Hands on Training on Animal Taxonomy" jointly conducted by Uttarakhand Science, Education and Research Centre, Government of Uttarakhand and Zoological Survey of India, Northern Regional Centre, Dehradun; organized "Seminar on Dr. Vijay Veer Foundation Lecture" held in the conference hall of ZSI, NRC, Dehradun on 05 January, 2023.
8. ANRC, ZSI organised one day training on Biodiversity of Andaman and Nicobar Islands.
9. Dr. Anjum N. Rizvi, Organized as a joint coordinator a collaborative Webinar with Dr. Harisingh Gour Vishwavidyalaya (A Central University), Sagar (M.P) on "The role of Biodiversity Conservation in Ecosystem functioning" on 14th December 2022.

Trainings Attended

1. **Dr. Souvik Sen**, Scientist-D, Mrs. Anindita Ghosh , Dr. Atanu Naskar , Asst. Zool attended the 'One Day Capacity Building Workshop on Implementation of Provisions of CITES' [organized by MoEFCC and hosted by Zoological Survey of India] at Hyatt Regency, Kolkata on 20th January 2023.
2. **Mr. Arka Mukherjee**, JRF have participated in the 10 days SERB funded high end Workshop on "Advances in Molecular Taxonomy and Phylogenetics" in ICAR CIFRI at Mumbai Versova from 30th January, 2023 onwards.
3. **Dr. Jayita Sengupta, Shri. Akhil Nair, SZA**, is participating in the 18 days Senior Zoological Assistant's training organized by HQ, ZSI, Kolkata from 24th January, 2023 to 10th February, 2023 at Kolkata.

Lectures Delivered

- 1. Dr. V.D. Hegde**, Scientist-E, WGRC, Kozhikode delivered a lecture to Zoology students of MES Mampad College, Malappuram on 06 January 2023; delivered a lecture to M.Sc. Applied Zoology students of University of Calicut during Orientation course organized by ZSI-WGRC, Kozhikode on 11 January, 2023.
- 2. Dr. Bindu L.**, Scientist-E, WGRC, Kozhikode delivered a talk on '*Collection, preservation and identification of Protozoa*' to the M.Sc. Applied Zoology students of University of Calicut.
- 3. Dr. P. Girish Kumar**, Scientist-D delivered a lecture on '*Hymenoptera*' and imparted training on '*Insect collection and preservation techniques*' to the 3rd semester M.Sc. students of the Department of Zoology, University of Calicut on 11 January, 2023.
- 4. Shri. Sreejith S. Kumar**, Senior Zoological Assistant has delivered a lecture on '*Animal Taxonomy*' during *One day Hands on Training workshop on Animal Taxonomy* in collaboration with Youth Voice, Edakkeppuram on 14 January, 2023 for school and college students at Edakkeppuram UP School, Kannapuram.
- 5. Dr. Kamalakannan M.** Senior Zoological Assistant has delivered a lecture on '*Mammal diversity and their role in ecosystem functioning*' to the M.Sc. Zoology students of University of Calicut.
- 6. Shri. Amal S.** Senior Zoological Assistant delivered lecture on "*Morphology of Insects*" to 3rd semester M.Sc. students of the Department of Zoology, University of Calicut on 12 January, 2023.
- 7. Dr. Gaurav Sharma**, Scientist-E delivered lecture on topic entitled "*Status and Conservation of Faunal Diversity in India*" to 102 Trainees of 54th RR IFS Probationers visited from Indira Gandhi National Forest Academy, Dehradun held in the conference hall of ZSI, NRC, Dehradun on 02 January, 2023; delivered lecture on topic entitled "*Role of ZSI in Conservation of Fauna*" in the "*Seminar on Dr. Vijay Veer Foundation Lecture*" held in the conference hall of ZSI, NRC, Dehradun on 05 January, 2023; delivered lecture on topic entitled "*Mammalian Diversity and their conservation in India*" to 65 Trainees of "*Hands on Training on Animal Taxonomy*" organized jointly by Uttarakhand Science, Education and Research Centre, Government of Uttarakhand and Zoological Survey of India, Northern Regional Centre, Dehradun held in the conference hall of ZSI, NRC, Dehradun on 18 January, 2023.
- 8. Dr. Archana Bahuguna**, Scientist-E delivered lecture during training programme "*Hands on Training on Animal Taxonomy*" in collaboration with USERC, on 18th January 2023 on topic Herpeto fauna: Taxonomy and DNA barcode.
- 9. Dr. Narender Sharma**, Scientist-E delivered lecture on the topic entitled, "Collection, Preservation and Identification of Insects" to the participants of the training Hands-on Training on Animal Taxonomy on 17.01.2022 organized by Uttarakhand Science Education & Research Centre in collaboration with Zoological Survey of India, Dehradun.
- 10. Dr. Anil Kumar**, Scientist-E delivered a talk on the 'Importance of wetlands and contribution of ZSI for wetland faunal documentation and conservation' in the meeting titled 'Stakeholder Meeting for Integrated Management Planning of Gobind Sagar, held on Jan 5, 2023 at Hotel Sagar View, Bilaspur, Himachal Pradesh; delivered illustrated talk on Avian Taxonomy and identification techniques on 17-01-2023 in Hands-on-Training on Animal Taxonomy" held at ZSI, NRC, Dehradun from 16.01.2023 to 21.01.2023.
- 11. Dr. Gopal Sharma**, Scientist-E and Dr. M. E. Hassan, Scientist-E delivered lecture on "Water Conservation" in the Webinar on "Water Conservation: Home to Habitat" organized by GPRC, ZSI, PATNA on 24th January, 2023.
- 12. Dr. C. Sivaperuman**, Scientist-E delivered talk on different topics in the 46th Indian Social Science Congress, held during 27th – 31st January 2023 at Bharathidasan University, Tiruchirappalli, Tamil Nadu; delivered a talk on an overview of Biodiversity of A & N Islands at Government Arts & Science College, Kumbakonam on 31st January 2023; delivered a talk on Island Biodiversity with special reference to Endemic, Endangered and Threatened species at Bishop Heber College, Tiruchirappalli, Tamil Nadu on 31st January 2023.

13. **Dr Anjum N. Rizvi**, delivered lecture on Soil Faunal Diversity to the trainees of Career Progression Mandatory Training Programme on 25th January 2023.
 14. **Dr. Atanu Naskar** has given a lecture on Taxonomy- Understanding the world around you! to all newly recruited Senior Zoological Assistants on 23.02.2023 at ZSI (HQ).
 15. **Dr. T. Kubendran** participated and delivered keynote address and lecture on “Integrative Taxonomy, Biomonitoring Potential and Conservation Strategies of Aquatic Insects with special Reference to Mayflies (Insecta: Ephemeroptera)” to International Conference on “Integrated Sciences for Sustainable Future” organized by the Department of Microbiology and Zoology, Nadar Saraswathi College of Arts and Science, Theni, Tamil Nadu on 19.01.2023 & 20.01.2023;
 16. **Dr. T. Kubendran** and **Dr. Suranjana Banerjee** delivered lectures on Insect orders of the Miscellaneous Insect Order Section for the Orientation Programme for Newly Joined Senior Zoological Assistants organized by DZSI, Zoological Survey of India, Kolkata.
 17. **Dr. K.G.Emiliyamma** delivered a ppt presentation on Orthoptera, Dermaptera and Odonata to the newly joined Sr.Zool. Asstts.
 18. **Dr. Tamal Mondal**, delivered a talk on Scheduled Mollusca and Scheduled Fishes for 40 Forest Range and Beat Officers and Forest Guard, Department of Environment and Forests, Government of West Bengal under the Capacity Building workshop for frontline staff of West Bengal Forest Department on identification of scheduled animals on 16th January 2023.
 19. **Dr. N. Marimuthu**, Scientist-E delivered a lecture on “Introduction on General Non-Chordata fauna with reference to Corals and Echinodermata” to newly joined Senior Zoological Assistants, organized by Zoological Survey of India, Kolkata on 10.01.2023; delivered a lecture on “Corals and Gorgonids” in the Capacity Building workshop for frontline staff of West Bengal Forest Department on identification of scheduled animals, organized by Zoological Survey of India, Kolkata on 16.01.2023.
 20. **Dr. C.K. Mandal**, Scientist-B delivered a lecture on “Annelid fauna” to newly joined Senior Zoological Assistants, organized by Zoological Survey of India, Kolkata on 10.01.2023.
 21. **Dr. D.S. Suman** delivered a lecture at NIV Pune on training course of Project staff under NIV collaborated project on 2 Jan. 2023.
 22. **Dr. Indu Sharma**, Scientist- E delivered an invited lecture entitled “High Altitude Cold Desert: Habitat, Fauna and Challenges” in the International Conference at Sikar Rajasthan on “SCITECHCON-2023, *An International Conference on Emerging Challenges, their Solutions and Recent Advances in Science and Technology*” on 13-14th January 2023 at Shobhasaria Group of Institute, Sikar.
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Gallery



New Year Day celebration at ZSI, Head Quarter



Skill Internship at ZSI, Kolkata



Career Progression Training for Senior Zoological Assistant



Capacity Building Workshop for frontline staff of West Bengal Forest Department on identification of scheduled animals



Glimpses from Exhibition stall of ZSI at 108th Indian Science Congress at Nagpur, India



Glimpses from 108th Indian Science Congress at Nagpur, India



Birth Anniversary of Netaji Subhash Chandra Bose



Launching of website of Animal Taxonomy Summit 2023



Mission LiFE initiative



CITES Workshop at Hayatt Regency, Kolkata