

ZSI

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49

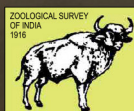
March 2023

E-News

Monthly E-Newsletter from Zoological Survey of India



Ministry of Environment,
Forest and Climate Change



सत्यमेव जयते



ONE EARTH • ONE FAMILY • ONE FUTURE

From the Director's Desk

**Cover**

Ratufa indica (Erxleben, 1777);
Courtesy: FBRC, Hyderabad
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It is indeed a pleasure for me to bring out the March 2023 issue of E-News to the wide spectrum of readers. Being the pioneer taxonomical institution on faunal communities, the Zoological Survey of India (ZSI), under the Government of India has been persistently providing information on the faunal resources of India through surveys, explorations, identification along with status surveys and assessment of ecological parameters. Comprehensive field surveys were undertaken in various Protected Areas across India covering all the biogeographic zones. A detailed work plan to carry out the vulnerability assessment of freshwater ecosystems of northeast India was defined in a Meeting with GIZ officials through NERAG Project. ZSI has been carrying out regular tagging of Olive Ridley Turtle along the Odisha coast in March 2023 and tagged 12 turtles whereas 37 previously tagged turtles were also recorded. A one-day workshop on the Role of Faunal Diversity for Sustainable Environment was organized at Desert Regional Centre (DRC), Jodhpur, and inaugurated the newly renovated Conference Hall at the Centre was made. The discoveries, exploration, and outcome of ZSI have been published in 27 papers in peer-reviewed journals and 11 book chapters along with 2 popular articles in this month. Altogether 13878 specimens were identified under 1952 species. The scientists of ZSI described 16 new species comprising insects, spiders, fishes, and amphibians whereas 3 species are recorded as a new distributional record to India. Altogether 51 DNA barcodes have been generated and uploaded to GenBank. Several programmes and awareness campaigns have been organized to sensitize the students and general public with the active participation of ZSI/HQ, Kolkata, and all the 16 regional centres across India under the Mission LIFE.

I wholeheartedly appreciate the hard work of all the scientists and staff of this office for contributing significantly during this month.

Jai Hind

Dr. Dhriti Banerjee

Director
6th April 2023
Kolkata

HEADQUARTERS, KOLKATA

Eleven surveys have been conducted during this month including Dhapa, Nalikul, Majherhat, Tea gardens of Meghalaya, different localities of Bihar, different Geo-climatic region of West Bengal, Manas National Park of Assam, Gulf of Mannar and Palk Bay of Tamil Nadu, Aligarh of Uttar Pradesh, Golden Quadrilateral covering Delhi, Haryana and Chandigarh and an Institution visit to IARI, New Delhi, Eastern India. A total 5149 examples under 596 species have been identified during the month covering Acari, Arachnida, Collembola, Formicidae, Chalcidae, Crustacea, Diptera, Fresh and Marine water fishes, General non chordate, Hymenoptera, Isoptera, Miscellaneous Insect Order, Mollusca, Nematelminthes, Orthoptera, Dermaptera, Platyhelminthes and Paleozoologic samples. Identification report of 15 seized Bivalve [Mollusca] specimens has been sent to the Forest Range Officer, Office of the Forest Range Officer, National Park West Range, Sunderban Tiger Reserve, Vidya, South 24 Parganas on request. Five species were augmented in National Zoological Collections [NZCs]. Two new species of jumping spiders *Phintella dhritiae* Sudhin, Sen & Caleb, 2023 and *Phintella platnicki* Sudhin, Sen & Caleb, 2023, one new species of Fish *Garra laishrami* Surachita, Roy Chowdhury & Palita 2023, one new species of mayfly *Choroterpes* [Ch.] *girigangaensis* Kubendran et al., 2022 have been published. One species of Hymenoptera *Schizophragma mitai* Triapitsyn has been reported for the first time in India. Two examples of type specimen of Palaemonid shrimps *Periclimenes abdukalami* sp. nov. [Holo-type] have been deposited in NZCs. DNA isolated and PCR was conducted from 10 examples of Diptera. Identification and Advisory services have been rendered to Ramakrishna Mission Vivekananda Centenary College, Rahara, Victoria Institution [College], University of Calcutta, Dr. Biswajit Patra, Rituparna Sengupta, Moulita Chatterjee, Dr. S. K. Singh, Head, Dept. of Entomology, College of Agriculture, Himachal Pradesh, Prof. Samar Kumar Saha, Visva Bharati, Santiniketan, Dr. Sunanda Sahoo, Institute of Forest Productivity, Ranchi, Gumla Road, Jharkhand, Dr. P. Chowdhury, Associate Professor, Dept. of Environmental Science, University of Calcutta. Four Ph. D. Scholars of Ranchi University were guided for the study of Macro benthos with special reference to Crustaceans, Molluscs, Soil Zoology, General Non-Chordates. Students from M. Sc. [Entomology Special paper], Ramakrishna Mission Vivekananda Centenary College, Rahara visited various sections of ZSI, Kolkata and developed their knowledge in collection and preservation techniques.



Dr. Tamal Mondal, Scientist – D, ZSI, HQ, Kolkata provided reply on the detailed information related to Faunal Communities of India in respect to Ecosystem-wise fauna, yearly addition of fauna, endemic fauna, threatened fauna for the inclusion in Animal Book as required by Ministry of Statistics through ZSI/HQs, provided necessary input and reply for Provisionally Admitted Question for the Rajya Sabha related to Pollution in water sources as required by MoEFCC through ZSI/HQs, prepared details presentation on TechDome Contents under three separate ecosystems and submitted to this office as required by Human-Centred Design & Computing Group, Centre for Development of Advanced Computing (C-DAC) through ZSI/HQs, provided necessary input related to Import of Hunting Trophies as required by Wildlife Division, Ministry of Statistics through ZSI/HQs, provided necessary input and reply for Provisionally Admitted Question for the Rajya Sabha related to Decline in biodiversity as required by MoEFCC through ZSI/HQs, provided necessary input and reply for Admitted Question for the Lok Sabha related to Endangered Wildlife Species as required by MoEFCC through ZSI/HQs. Dr. Suranjana Banerjee, Assistant Zoologist attended the International Conference on “Technological Innovations in Animal Science Research and Social Transformation” at Utkal University, Bhubaneswar from 24th to 26th February

2023 and presented a poster on Diversity, Distribution and Importance of Habitat Conservation of Odonata [Class: Insecta] in Satkosia Baisipalli Wildlife Sanctuaries, Satkosia Tiger Reserve, Orissa, India. Dr. Banerjee received the award for best poster presentation in the Conference. Ms. Debashree Dam, Scientist-B participated in a one-day Seminar at Tega Industries, Kolkata on 4th March 2023 as part of celebration of International Women's Day, she attended the 77th Foundation Day program of CIFRI at Barrakpore, West Bengal as an invited guest on 17th March 2023 in which Director, ZSI graced the occasion as Guest of Honour, she also attended the Women Achievers Award Function as a special guest at Press Club, Kolkata on 18th March 2023 in which Dr. Dhriti Banerjee was awarded with the Women Achiever's Award by International Benevolent Research Foundation [IBRF]. Mrs. Anindita Ghosh, Assistant Zoologist attended Audit queries regarding training Programmes organised in last 5 years. Dr. Suman Das, Senior Zoological Assistant studied one Holotype [W9048/1, *Circinatechinorhynchus pseudorhombi* Bhattacharya, 2007] and one Paratype [W9064/1, *Plagiorhynchus (Prosthorhynchus) deysarkari* Bhattacharya, 2002] specimen of Acanthocephala. A total of 52242 visitors visited the Zoological galleries of Indian Museum during this month.

NORTH EASTERN REGIONAL CENTRE, SHILLONG, MEGHALAYA

One field survey has been conducted under the Project “Faunal diversity of Dibru Saikhowa Biosphere Reserve, Assam” from 17th March to 25th March, 2023. A total of 1182 examples and 4 Plankton vials were collected. A field survey is being undertaken under the Project “Exploring the Subterranean biodiversity: selected cave fauna of Meghalaya state (Phase I. Khasi hills)” from 26th March to 2nd April, 2023. A total of 553 specimens under 75 species have been identified during the month. An Exhibition Stall was presented at State Convention Centre as a part of Science Day Celebration organized by the Government of Meghalaya on 22nd and 23rd March 2023. 27 Students and 3 faculties from B. Borooah College, Assam visited ZSI/NERC on 21st March, 2023. Three new species of frogs such as *Amolop schanakyia* Saikia, Laskar, Dinesh, Shabnam and Sinha, 2022, *Amolops tawang* Saikia, Laskar, Dinesh, Shabnam and Sinha, 2022 and *Amolops terraorchis* Saikia, Sinha, Laskar, Shabnam and Dinesh, 2022 have been described from Arunachal Pradesh, Northeast India. Dr. U. Saikia, Scientist- D reviewed a manuscript for the *Journal of Threatened Taxa* and rendered advisory services to Dr. K. Deka and Dr. A. Boro, Department of Zoology, Pandu College, Guwahati.



Students from B. Borooah College, Assam visiting the Centre's Museum



A glimpses of exhibit at State Convention Centre as a part of Science Day Celebration organized by the Government of Meghalaya on 22nd & 23rd March, 2023

WESTERN REGIONAL CENTRE, PUNE, MAHARASHTRA

Two surveys have been conducted to Western Ghat Part of Kerala (Wayanad, Palakkad and Idukki districts) and Hadapsar, Pune (Local Survey). A total of 602 specimens and 68 species have been identified during the month. Dr. Md. Jafer Palot, Scientist-B received an award [Balasahithyapuraskaram-2022] from the Kerala State BalaSahithya Institute, Govt. of Kerala, Thiruvananthapuram for book entitled, Corona kalathoru Vavval [Bats of Kerala in Malayalam] under the category of best science literature for children. Identification and advisory services have been rendered to Mr. Pranil Jagdale, CSIR fellow, Ph. D. student of Dr. Sujata Magdum, KTHM, College, Nashik for 02 months for identification of dung beetles for his PhD thesis, to Assistant Conservator of Forest, Solapur, Maharashtra, Range forest Officer, Nashik, Maharashtra for confiscated Quill of Porcupine [01], Pieces of horns of Chausinga [02], Horn of Barasingha [01], Gall bladder of Jungle cat [01], Whale ambergris in small box [01], Stone [01], Stones in two bottles [K & M] [02], Musk pod [01], Ring made of skin [01], confiscated Shell [01] and Corals [02], Hatha Jodi [01], Shed skin of Snakes [01] and Snake Vertebrae [05], to Mr. Manoj Balakrishnan, Deputy Director of Wildlife, Palakkad Wildlife Division, Kerala, to Mrs. Pallavi Takawane from Prof. Ramakrishna More Arts, Commerce and Science College, to Ms. Keerthana Haridas, Ph. D. Student, University of Calicut, Kerala on gall midge. 12 sequences (mt 16S rRNA) of amphibian samples from the Great Nicobar Islands, Madhya Pradesh, Orissa, Andhra Pradesh under nine species was submitted to the GenBank. Three new species namely, *Amolops chanakya* Saikia, Laskar, Dinesh, Shabnam, and Sinha, 2022, *Amolops tawang* Saikia, Laskar, Dinesh, Shabnam, and Sinha, 2022, *Amolops terraorchis* Saikia, Sinha, Laskar, Shabnam, and Dinesh, 2022 have been described.



Nilgiri Tahr, *Nilgiritragus hylocrius*



Nilgiri Flycatcher



Anaimalai Spiny Lizard, *Salea anamallayana*

CENTRAL ZONE REGIONAL CENTRE, JABALPUR, MADHYA PRADESH

One survey has been conducted to Panna Biosphere Reserve, Panna (M.P.) from 20th February 2023 to 2nd March 2023. A total of 1034 specimens belonging to 22 major faunal groups have been collected and 16 specimens belonging to 06 different faunal groups have been sampled for DNA studies. A total of 497 specimens belonging to 93 species have been identified during the month. Dr. Sandeep Kushwaha, Assistant Zoologist, participated in a one day National Seminar on "Intellectual Property Right-Its Importance in present scenario" organized by IQAC, Swami Vivekanand Government College Berasia, Dist- Bhopal (M.P.). He also participated in 5th National Editor's

Summit on 18th and 19th March 2023 at NDMC Convention Centre, Jai Singh Road, Connaught Place, New Delhi organized by Innovative Education and Scientific Research Foundation (IESRF). Dr. Sandeep Kushwaha, Assistant Zoologist, provided advisory services to Dr. Akhlaq Husain, Scientist-E (Retd.), ZSI by identifying some specimens. Shri. Akhil Nair, Senior Zoological Assistant, provided information about the collection and preservation methods of various group of insects to one M.Sc. Entomology student and one Ph. D scholar of Jawaharlal Nehru Krishi Vishwavidyalaya, Jabalpur on request. Mrs. Pallabi Priyadarsini, Assistant Zoologist and Mr. Sourav Pal, Artist, prepared one poster on

the theme reduction of single use plastic and distributed in Home science college, Jabalpur and to the local public for the awareness under Mission LIFE. Global Recycling Day was celebrated by Officers and staff on 17th March 2023 at ZSI/ CZRC, Jabalpur. Dr. P. S. Bhatnagar, Scientist-E & O/C conducted Hindi Bhasha Prabodh course examination on 21st March 2023 at CZRC, ZSI, Jabalpur organised by Kendriya Hindi Prakashishan Sansthan, MoHA, Gol, New Delhi. The information under RTI Act 2005 has been compiled and submitted the same to CPIO for the RTI application, as per the query received.



Poster made on the theme "Reduction of Single use Plastic" displayed on Global Recycling Day, 17th March 2023



Poster made on the theme "Reduction of Single use Plastic" displayed on Global Recycling Day, 17th March 2023

DESERT REGIONAL CENTRE, JODHPUR, RAJASTHAN

A total of 925 specimens under 72 species have been identified and registered. Identification and advisory services rendered to Mr. Kamlesh Kumar Verma, Asst. Professor, Zoology, Government P.G. College, Jhalawar. Representative stall of DRC was set up during “वृक्ष उत्पादन मेला” organized by AFRI, Jodhpur on 17th March 2023.



NORTHERN REGIONAL CENTRE, DEHRADUN, UTTARAKHAND

One survey has been conducted from 14th March to 19th March 2023 to two wildlife sanctuaries and two conservation reserves of Punjab & Haryana. A total 521 specimens belonging to 9 faunal groups have been collected. Apart from this, a total of 103 avian species [56 spp. from Khol Hi-Raitan, 63 spp from Abohar WLS and 68 spp. from Conservation Reserves of Punjab] and eight species of mammals have been observed. Scientists of the centre examined and registered 237 specimens and identified 71 species. Dr. Gaurav Sharma, Scientist-E submitted the Management Effectiveness Evaluation studies report of Kane Wildlife Sanctuary of Arunachal Pradesh conducted as Team Member of MEE TEAM 16 to The Chairman, MEE Team 16. Sh. M.K. Meena, Assistant Zoologist, Ms. Maya Choudhary, Senior Zoological Assistant, Ms. Jyoti Verma, Senior Zoological Assistant, Ms. Purbita Roy, Senior Zoological Assistant and Mr. Yogender Singh, Senior Zoological Assistant attended interaction programme for Ph. D. Scholars /Post-Doctoral Fellows organized by UGC –Human Resource Development Centre (HRDC), University of Calicut from 7th March to 13th March 2023. The Officer-in-Charge and staff members participated in Mission Life Programme- Save Water, Save Electricity Awareness Rally and Plantation drive” in Dehradun on 27th March 2023.



Dendrocopos macei [Vieillot, 1818]



Visit of Faculty & Students of College of Horticulture & Forestry, Pasighat, Arunachal Pradesh



Mission LiFE Plantation Drive on 27th March 2023

SOUTHERN REGIONAL CENTRE, CHENNAI, TAMIL NADU

115 species of Ephemeroptera, Odonata, Lepidoptera, Plecoptera, Mollusca, Rotifera, Cladocera, Rhizopoda, Ostracoda, Amphibia, and Reptiles have been identified and registered during the month. Solitary bee *Euasps polynesia* Vachal, 1903 (Hymenoptera: Apoidea: Megachilidae) has been discovered as a new addition to Indian fauna from Tawang, Arunachal Pradesh.



Euasps polynesia Vachal, 1903



Lion Tailed Macaque

GANGETIC PLAINS REGIONAL CENTRE, PATNA, BIHAR

A combined faunistic survey have been conducted under Fauna of Bihar (Invertebrates) Part II from 9th March to 22nd March and 2689 specimens have been collected. A total 656 of specimens and 39 species have been identified during the month. Dr. Gopal Sharma, Scientist-E & Officre-in-Charge, judged the painting competition at Killkari Bal Bhawan Patna on 12th March 2023. GPRC, ZSI, Patna participated in the BIHAR DIWAS 2023 at Gandhi Maidan, Patna from 22nd March to 24th March 2023 and exhibits of Zoological specimens displayed. The Mission LIFE and Year of the millets posters were also displayed. Dr. M. E. Hassan, Scientist-E, reviewed manuscript entitled "Bactocera species, the substantial threat to temperate stone fruits" submitted to BIOLOGIA.

GPRC, ZSI, Patna participated in Bihar Diwas 2023



Hon'ble Minister visiting Stall of ZSI



Common mass visiting ZSI Stall



Hon'ble MoS. Shri Ashwini Choubey MoEFCC visited the ZSI stall in Bausi Banka in Bihar during Environmental Exhibition on 10.03



Bihar Police and Forests Officials were made aware during the visit to the ZSI stall in Bausi Banka in Bihar during Environmental Exhibition on 10.03.2023

Dr. Gopal Sharma inaugurated the function at Bal Bhawan Patna



HIGH ALTITUDE REGIONAL CENTRE, SOLAN, HIMACHAL PRADESH

One survey tour has been undertaken in Agro-ecosystem of Districts Bilaspur and Una of HP by Dr. P. C. Pathania and Party from 21st February to 2nd March 2023. A total of 291 examples belonging to 67 species have been identified during the month. DNA Barcoding of 12 specimens of Lepidoptera (Butterfly) from Lahaul valley Distt Lahaul & Spiti have been done and submitted to NCBI. One new species of lepidoptera *Miresa chandani* Amit & Pathania, 2023 has been described. One species of fish *Channa harcourtbutleri* (Annandale, 1918) has been reported as new record to India. Identification and Advisory services was rendered to Dr. V. Sharma, Assistant Professor, Govt. PG College, Dharampur, Mandi, HP, Dr. Hijam Shiela Devi, Assistant Professor, Department of Entomology, School of Agricultural Sciences and Rural Development (SASRD), Nagaland University. Dr. P.C. Pathania, Scientist-E, reviewed 3 research papers for the Indian Journal of Ecology, Records of the Zoological Survey of India and Biological Forum-An International Journal. Dr. Kamal Saini, Assistant Zoologist, reviewed one research paper for International Journal of Research. Dr. Avtar Kaur Sidhu, Scientist-E, acted as resource person in 2 weeks refresher course on Bio Sciences being conducted through online mode from 6th March to 18th March 2023 for enhancing the professional competence of College/University teachers organized by UGC – Human Resource Development Centre Himachal Pradesh University, Shimla.

MARINE BIOLOGY REGIONAL CENTRE, CHENNAI, TAMIL NADU

Three surveys have been conducted under the programmes “Health Assessment of Indian Corals and Coral Reefs” in collaboration with Space Application Centre, Ahmedabad from 5th March to 11th March 2023 in Gulf of Mannar Biosphere Reserve, ‘Status and Population dynamics of Andaman Teal Anasalbogularisin Andaman Islands’ from 15th March to 24th March 2023 in Andaman Islands and a 12 days survey tour along the coastal area of Andhra Pradesh

under project ‘Integrative taxonomy, distribution and current status of batoids of India’. A total of 942 fishes, 106 molluscs and 99 crustaceans have been collected for taxonomical identification. Dr. K. K. Bineesh, Scientist-E, conducted three one-day local survey to Kasimedu fish landing centers in Chennai and collected fish samples for taxonomical identification. A total of 62 species from 297 specimens have been identified and registered in MBRC, Chennai. MBRC provided

an identification & advisory service to Ms. Irfana Tabassum for squid sample identification on request, to Mr. Jinoblessil, FRO, Gulf of Mannar National Park, Thoothukudi, Tamil Nadu for the identification of confiscated wildlife materials of sea cucumber on request, to CID Forest Mobile Squad, Belgavi, Karnataka for the identification of confiscated wildlife materials of gorgonians on request.



Anemone Shrimp associated with Sea anemone, Gulf of Mannar



Research team logging the spectrometry data of diseased corals from Gulf of Mannar



Incidental catch of Hammerhead Shark at Machlipatnam



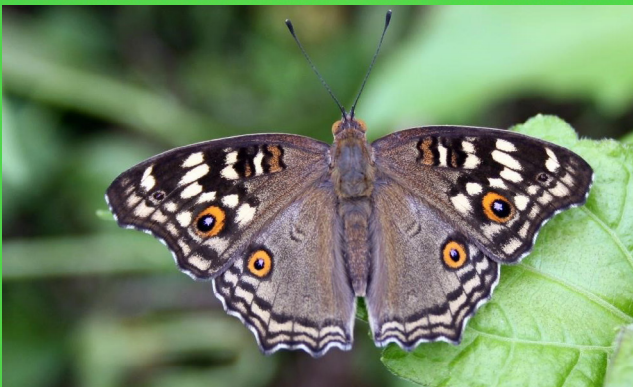
Mobulatarapacana landed at Kmbabhishekam landing centre



Research team logging the spectrometry data of diseased corals from Gulf of Mannar

ANDAMAN AND NICOBAR REGIONAL CENTRE, PORT BLAIR

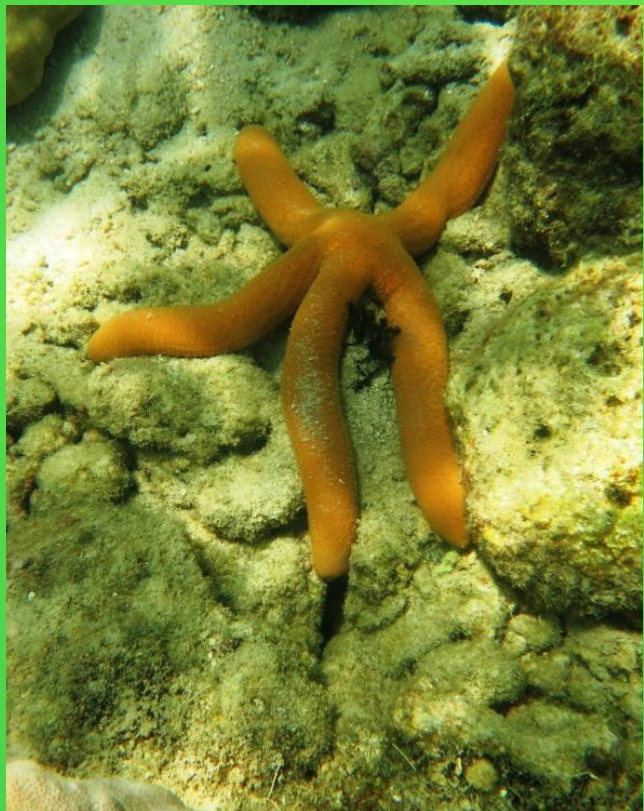
Four long term surveys have been conducted in Andaman and Nicobar Islands covering Great Nicobar Island during 1st March to 31st March 2023 and 15th March to 29th March 2023; North Andaman and its adjoining Islands during 1st March to 11th March 2023 and 20th March to 24th March 2023 to study the terrestrial and marine faunal diversity. A total of 28 days local field surveys have been conducted to South Andaman during 1st March to 30th March 2023 covering Ograbraj, Kalatang, Shoal Bay, Shoal Bay-16, Chidiyatappu, Sippighat, Airport Campus, Badabalu, Shoalbay-19, Collinpur, New Bimblytan, New Wandoor, Attamphad, Terlabad, Stewartgunj and Kamsarat Nallah to study the terrestrial faunal diversity. A total of 234 species have been identified comprised of Fishes [25 species]; Mollusca [29 species] were identified from the marine environment; Arachnida [22 species]; Lepidoptera [75 species]; Odonata [7 species]; Aves [76 species] have been identified from the terrestrial environment. A total of 335 specimens comprised of Arachnida [40 specimens]; Lepidoptera [160 specimens]; Odonata [30 specimens]; Fishes [62 specimens]; Mollusca [43 specimens] have been registered in National Zoological Collections. Metadata for 233 registered specimens have been prepared. Of which, 70 specimens belong to marine ecosystem and 163 specimens under terrestrial ecosystem. Three species of fishes have been identified to the Department of Environment & Forests, Andaman & Nicobar Islands.



Lemon Pansy *Junonia lemonias* [Linnaeus 1758]



Peacock Pansy *Junonia almanac* [Linnaeus 1758]



Linckia laevigata [Linnaeus 1758]



Phyllospongia foliascens [Pallas 1766]



Red-eared frog *Hylarana erythraea* [Schlegel 1837]



Tytler's Mabuya *Eutropis tytleri* [Theobald 1868]

SUNDERBAN REGIONAL CENTRE, CANNING, WEST BENGAL

Four days survey have been undertaken from 25th March to 28th March 2023 along Sunderban Biosphere Reserve. A total of 113 examples (59 sp.) have been identified including 64 examples (26 sp.) of molluscs, 43 examples (28 sp.) of fishes, 4 examples (3 sp.) of crustaceans and 2 examples (2 sp.) of echinoderms.

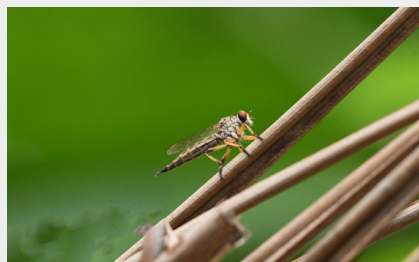


FRESHWATER BIOLOGY REGIONAL CENTRE, HYDERABAD, TELANGANA

A field survey under the programme Faunal diversity of Godavari have been conducted from 13th March to 1st April 2023 by Dr. M. Karuthapandi, Scientist D & Party. A total of 1084 specimens belonging to 113 species from Amaravathi, Vizag, Nellore, Andhra Pradesh, Bhadradi Kothagudem, Nirmal, Mancherial districts, Nagarkurnool, Asifabad, Telangana, Kinnersani and Pakhal Wildlife Sanctuary, Telangana have been identified and digitized. 10 DNA barcodes belonging to 10 species have been submitted to NCBI. Audit team from Indian Audit and Accounts Department has scrutinised the accounts of FBRC, ZSI, Hyderabad for the period 2015-16 to 2021-22 from 1st March to 15th March 2023.



Funambulus palmarum [Linnaeus, 1766]



Robber flies



Vulpes bengalensis [Shaw, 1800]



Students from Bachpan School with faculty, Hyderguda on World Wild life Day [3rd March 2023] at Freshwater Biology Regional Centre, Hyderabad

WESTERN GHAT REGIONAL CENTRE, KOZHIKODE, KERALA

A total of 503 specimens under 115 species in 82 genera belonging to 16 different faunal groups have been identified. Two sequences [One cytb: OQ596434; one 16S gene: OQ600602_ *Suncus niger*] of mammals have been uploaded at NCBI/BOLD website which were received from Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram. Three new species such as *Spilomena nilgiriensis* Tessa, Girish Kumar & Sureshan, 2023 [Hymenoptera: Crabronidae], *Spilomena unus* Tessa, Girish Kumar & Sureshan, 2023 [Hymenoptera: Crabronidae] and *Oricoruna iceryophagus* Surya, Binoy and Sureshan, 2023 [Hymenoptera: Pteromalidae] have been described. One new record to India i.e. *Trypoxylon schmiedeknechtii connexum* Turner [Hymenoptera:

Crabronidae] have been recorded from Uttarakhand, India.

As an initiative for the International Year of Millets- 2023 celebrations, the centre has made a dedicated backyard garden within the campus for cultivating the millet grains for promoting the use of millets and the theme of health and wellness for a sustainable future. As of now, four types of millets such as Ragi, Bajra, Jowar and Corn seedlings were planted in the backyard garden of campus. Dr. Girish Kumar P., Scientist-D, reviewed a manuscript on Hymenoptera for the journal Zootaxa and three manuscripts on Hymenoptera for Records of Zoological Survey of India. He identified 14 species of Hymenoptera for Dr. U Amala, Sr. Scientist, NBAILR, Bengaluru, five wasp species for Dr.

Deen Mohd Bhat, Assistant Professor, Department of Zoology, University of Kashmir, 18 wasps at family level based on photographs for Dr. Pawan K Sharma, Scientist, Himachal Pradesh Agricultural University, Palampur, 3 species of wasps for Dr. Mohammed Shareef, Assistant Professor, Department of Zoology, PSMO College, Thirurangadi, Kerala and 5 species of wasps for B.Sc. students of Chittur Government College, Palakkad for their dissertation works. Dr. Kamalakannan M., Senior Zoological Assistant, identified Indonesian primate species [seized live animals] through photographs and the identification details have been sent, provided the inputs on extinct and threatened wildlife occurs in Madhya Pradesh and Uttar Pradesh, raised by the Lok Sabha.

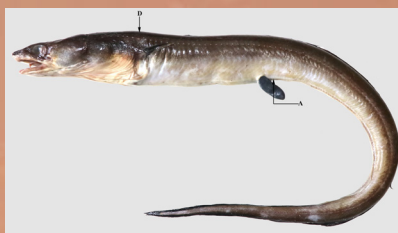


Sowing of millet seeds in the office backyard

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

Two days local survey to Bahuda Estuary has been conducted by Dr. A. Gokul and Party and collected 1236 specimens from the survey. Eight days survey to Andhra Pradesh Coast have been conducted by Dr. Anil Mohapatra & Party and collected 1033 specimens and camera trap photos of otters and several other mammals have been observed. A total of 656 specimens have been identified by the scientists and scientific staffs of the Centre. Two DNA barcodes belonging to 2 species have been uploaded in the NCBI data base. A new species of congreidae eel *Rhynchoconger bicoloratus* Kodeeswaran, Mohapatra, Kumar, Lal, 2023 have been described from 3 specimens collected from

Arabian Sea at a depth of 200 – 300 m. Another species of Moray eel *Gymnothorax tamilnaduensis* Kodeeswaran, Kantharajan, Mohapatra, Kumar, Sarkar, 2023 have been described from Tamil Nadu coast. Dr. Dhriti Banerjee,



Rhynchoconger bicoloratus

Director, Zoological Survey of India, Dr. C. Raghunathan, Scientist-F, Dr. G.P. Mandal, Scientist- E & HOO &

Dr. Debashree Dam, Scientist-B visited the centre and had an meeting with the CPWD personnel regarding the development of Regional Museum and State of Art Auditorium. Students of various institutes attending training and capacity building programme on DNA barcoding of marine and estuarine isopods and their host fishes organized by Brahmampur University, Odisha have visited the EBRC on 25th March 2023. During tagging have been made for 12 Turtles and 37 tags have been recovered. An adult female green turtle was recorded at Rushikulya rookery for the first time for probable nesting on 26th March 2023.



Director's visit to EBRC



Meeting with CPWD and EBRC staff



Green sea turtle at Rushikulya beach for the first time

ARUNACHAL PRADESH REGIONAL CENTRE, ITANAGAR

An extensive field survey has been conducted at Kane and Yordi-Rabe Subse WLS from 14th March to 23rd March 2023 by Smt. Ilona J. Kharkongor & party. A local survey at Doimukh Circle, Papum Pare District, Arunachal Pradesh has been conducted on 2nd March 2023 by Dr. Srinivasan & party. A total of 240 examples belonging to 57 species were identified, registered and digitized. Earth Hour was observed by switching off all the lights of the Campus for 1 hour from 8 pm to 9 pm on 25th March 2023. All the scientists and staff of this regional centre participated in the G20 Summit held at Itanagar on 25th March 2023 and exhibition was also made on significant National Zoological Collections of this regional centre. Dr. SD. Gurumayum extended an advisory service to Ms. Daina Ingo, M. Sc. student of Himalayan University and also reviewed a scientific paper of Uttar Pradesh Journal of Zoology.



ZSI, APRC, Itanagar attending Delegate of G20 summit, 2023 at Itanagar



Scientist and Scholars of ZSI, APRC, Itanagar at Kane Wildlife Sanctuary



Research Scholars of ZSI, APRC, Itanagar in International Seminar on Climate Change & Resilience at Assam Don Bosco University Tapesia, Guwahati



Student of Hornbill Residential School with Staffs of ZSI, APRC, Itanagar

MARINE AQUARIUM AND REGIONAL CENTRE, DIGHA, WEST BENGAL



Ozius deplanatus White, 1847

A total of 18 days local surveys have been conducted at Digha Mohona, Tajpur and Digha, West Bengal. A total of 388 specimens have been collected. A total 595 specimens belonging to 116 species have been identified. Altogether 66 live specimens have been released in the aquarium for public view. A total of 14 educational institutions from West Bengal, Odisha, Assam, Uttar Pradesh, etc. visited the Marine Aquarium as part of educational tour. Altogether 21 specimens of Crab (10 spp.) and 03 specimens of Cnidaria (01 sp.) have been deposited in National Zoological Collections and digitized. Three samples of gDNA and four PCR products amplified for polychaetes. The marine aquarium of the centre received a total numbers of 19,654 tourists during March 2023.

Training and demonstration session on "Marine fauna and their faunal resources from India" 3rd year 50 students along with faculty from Sri. Sai Siddhi Res. College, Baripada, Odisha during March 26 2023.



26/03/2023 13:56



Training programme for "Intertidal fauna collection, preservation and identification at Digha Mohana beach", organized by ZSI, MARC, Digha along with PurbaMedinipur Forest Department on 17th March 2023



Abalistes stellatus Anonymous, 1798



Operation of Shoreseine net Digha

NEW DISCOVERIES AND NEW RECORDS



*Amolops
tawang*

A new sp. of
frog described
from Arunachal
Pradesh by ZSI



*Oricoruna
iceryophagus*

Surya, Binoy and
Sureshan, 2023
[Hymenoptera:
Pteromalidae]



*Spilomena
nilgiriensis* Tessy

Girish Kumar
&Sureshan, 2023
[Hymenoptera:
Crabronidae]



*Spilomena
unus* Tessy

Girish Kumar
&Sureshan, 2023
[Hymenoptera:
Crabronidae]



*Phintella
dhritiae* Sudhin

Sen & Caleb,
2023 [female]



*Phintella
dhritiae* Sudhin

Sen & Caleb,
2023 [Male]



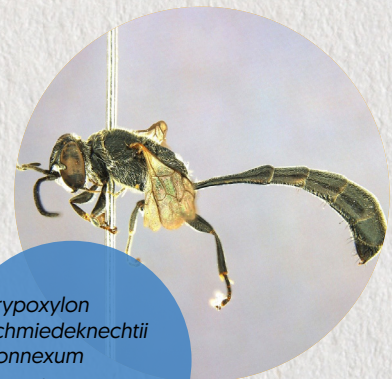
*Phintella
platnicki* Sudhin

Sen & Caleb,
2023 [female]



Garra laishrami sz

Roy Chowdhury
& Palita 2023



*Trypoxylon
schmiedeknechtii*
connexum

Turner [Hymenoptera:
Crabronidae] from
Uttarakhand, India



PUBLICATIONS

BOOK CHAPTERS

1. Ayisha Mawadda, N.V. and Girish Kumar, P. 2023. Distribution of Crabroninae [Hymenoptera: Crabronidae] wasps of Northern India with an updated checklist. In: Poovoli, A., Mumthaz, T.M.V. and Bursha, N. (Eds.), Proceedings of the three day International Conference on Faunal Diversity – Climate/ Global Warming/ Human Interference. Published by Sir Sayd College, Taliparambu. Pp: 102-119.
2. Banerjee, D., Naskar, A., Sengupta, J., Hazra, S. and Singh, S. 2023. Insecta: Diptera. In: Raghunathan, C., Hasan, M.E., Mondal, T. and Banerjee, D. (Eds.), Faunal Diversity of Puducherry. Published by the Director, Zool. Surv. India, 233-243.
3. Chakraborty, R., Das, S.K., Chand, D.S. and Karmakar, C. 2023. Arthropoda: Insecta: Orthoptera. In: Raghunathan, C., Hasan, M.E., Mondal, T. and Banerjee, D. (Eds.), Faunal Diversity of Puducherry. Published by the Director, Zool. Surv. India, pp. 217-223.
4. Dey, S.L. and Emiliyamma, K. G. 2023. Arthropoda: Insecta: Dermaptera. In: Raghunathan, C., Hasan, M.E., Mondal, T. and Banerjee, D. (Eds.), Faunal Diversity of Puducherry. Published by the Director, Zool. Surv. India, pp. 179-182.
5. Kamila, A.P. and Sureshan, P.M. 2023. A review on mantid fauna [Insecta: Mantodea] of Karnataka, India with ten new distributional records. In: Proceeding of three-day international conference on faunal diversity/ climate/ global warming/ human interference. Department of Zoology, Sir Syed College, Taliparamba, Kannur, Kerala. ISBN: 978-81-958276-2-6.
6. Mazumdar, P., Rameshkumar, A. and Kazmi, S.I. 2023. Arthropoda: Hymenoptera: Vespoidea: Vespidae. In: Raghunathan, C., Hasan, M.E., Mondal, T. and Banerjee, D. (Eds.), Faunal Diversity of Puducherry. Published by the Director, Zool. Surv. India, pp. 211-215.
7. Pillai, H.U.K. and Verghese, T.A. 2023. Arthropoda: Crustacea: Copepoda Marine Planktonic. In: Raghunathan, C., Hasan, M.E., Mondal, T. and Banerjee, D. (Eds.), Faunal Diversity of Puducherry. Published by the Director, Zool. Surv. India, pp. 107-117.
8. Rajan, T., Girish Kumar, P. and Sureshan, P.M. 2023. A review of the genus *Spilomena* Shuckard [Hymenoptera: Crabronidae] with the description of two new species from India. In: Poovoli, A., Mumthaz, T.M.V. and Bursha, N. (Eds.), Proceedings of the three day International Conference on Faunal Diversity – Climate/ Global Warming/ Human Interference. Published by Sir Sayd College, Taliparambu. pp: 91-101.
9. Rameshkumar, A., Sardar, S., Kazmi, S.I., Dey, S. and Majumder, B. 2023. Hymenoptera: Encyrtidae, Mymaridae [Chalcidoidea], Evaniidae [Evanioidae], Apidae, Halictidae, Megachilidae [Apoidea]. In: Raghunathan, C., Hasan, M.E., Mondal, T. and Banerjee, D. (Eds.), Faunal Diversity of Puducherry. Published by the Director, Zool. Surv. India, pp. 203-210.
10. Singh, L.R.K., Gupta, D. and Chandra, K. 2023. Ichneumonid Parasitoids. In: Omkar [Ed.], Parasitoids in Pest Management. CRC Press. 8 pp.
11. Surya, K.S., Binoy, C. and Sureshan, P.M. 2023. Description of a new species of *Oricoruna* Bouček [Hymenoptera: Pteromalidae] associated with Egyptian cottony cushion scale, *Icerya aegyptiaca* [Douglas] [Hemiptera: Monophlebidae] on *Macaranga peltata* Roxb. [Malpighiales: Euphorbiaceae] from India. In: Proceedings of the Three Day International Conference on Faunal Diversity, Climate, Global Warming and Human Interference. 140-146. ISBN: 978-81-958276-2-6

PAPERS

1. Ahmad, A. and Sharma, G. 2023. Occurrence of *Goniocotes gallinae* [De Geer, 1778] [Phthiraptera: Insecta] on *Gallus sonneratti* Temminck, 1813, Grey Jungle Fowl Bird [Galliformes: Phasianidae] as New Host Record from India. *Biological Forum— An International Journal*, 15[2]: 619-622.
2. Bahugna, A. 2023. Tools and techniques for identification of threatened fauna. In: *Society of Wildlife Forensic Science News*, pp. 19 with link on page 3.
3. Das, R.R., Sreeraj, C.R., Mohan, G., Simon, N.T., Ramachandran, P., Ramachandran, R., Krishnan, P. and Kumar, D.S.V. 2023 Evidence of Coral Diseases, Phase Shift, and Stressors in the Atolls of Lakshadweep Islands, Arabian Sea—With Geographical Notes on Their Occurrence within the Indian EEZ and Contiguous International Waters. *Diversity*, 15: 382. <https://doi.org/10.3390/d15030382>
4. Deepa J., Bharath, B., Karuthapandi, M. and Jadhav, S. 2023. Butterfly diversity of Kawal Tiger Reserve, Telangana. *Uttar Pradesh Journal of Zoology*, 44[2]: 51-63.
5. Ghosh, A., Mukhopadhyay, A., Tripathy, B. and Sajan, S.K., 2023. Range Extension of a Predatory Sea Snail *Sulcerato recondita* [Melvill & Standen, 1903] in India [Gastropoda, Eratoidae]. *The Festivus*, 55: 37-39.
6. Ghosh, D., Saini, J., Subramanian, K.A and Chandra, K. 2023. *Euaspsis polynesia* Vachal, 1903 [Hymenoptera: Apoidea: Megachilidae]: A New Addition to Bee Fauna of India with Comments on Natural History. *Natl. Acad. Sci. Lett.*, DOI:10.1007/s40009-023-01234-x
7. Hegde, A., Kadadevaru, G. and Dinesh, K. P. 2023. Tadpole morphology of Jerdon's Narrow-mouthed Frog *Uperodon montanus* [Jerdon, 1853] with a range and elevation extension report from Western Ghats, India. *Journal of Threatened Taxa*, 15[2]: 22623-22631.
8. Kalawate, A.S., Surwade, P. and Pawara, S. N. 2023. An annotated checklist of the economically important family of moths [Lepidoptera: Heterocera: Noctuidae] of the northern Western Ghats, India, with notes on their type species, diversity, distribution, host plants, and an unusual new faunistic record. *Journal of Threatened Taxa*, 15[2]: 22632–22653, <https://doi.org/10.11609/jott.7824.15.2.22632-22653>.
9. Katewa, A. and Pathania, P.C. 2023. Studies on External male and female genitalia of *Miresa Walker* [Lepidoptera: Limacodidae] with a New species and a new record from the Western Ghats, India. *Indian Journal of Ecology*. 50 [1]:175-181. DOI: <https://doi.org/10.55362/IJE/2023/3874>
10. Khandal, D., Bohra, D.L. and Talmale, S.S. 2023. First occurrence record of Indian Roundleaf Bat *Hipposideros lankadivain* Rajasthan, India. *Journal of Threatened Taxa*, 15[1]: 22392–22398. <https://doi.org/10.11609/jott.8034.15.1.22392-22398>.
11. Kodeeswaran, P., Kantharajan, G., Mohapatra, A., Ajith Kumar, T.T. and Sarkar, U.K. 2023. A new short brown unpatterned moray eel [Anguilliformes: Muraenidae] from the southeast coast of India, Bay of Bengal. *Zoosystematics and Evolution*, 99 [1]: 253-260.
12. Kodeeswaran, P., Mohapatra, A., Ajith Kumar, T.T. and Lal, K.K. 2023. A new deep water conger eel species of the genus *Rhynchoconger* [Anguilliformes: Congridae] from the southwest coast of India, Arabian Sea. *Journal of Fish Biology*. <https://doi.org/10.1111/jfb.15367>
13. Kundu, S., Kamalakannan, M., Mukherjee, T., Banerjee, D. and Kim, H-W. 2023. Genetic Characterization and Insular Habitat Enveloping of Endangered Leaf-Nosed Bat, *Hipposideros nicobarulae* [Mammalia: Chiroptera] in India: Phylogenetic Inference and Conservation Implication. *Genes*, 14[3]: 765. <https://doi.org/10.3390/genes14030765>
14. Kushwaha, S. and Pant, H. 2023. Role of Nanoparticles in maintaining food safety and tackling malnutrition. *International Journal of Clinical Biochemistry and Research*, 10[1]: 262-277.
15. Laskar, B.A., Adimalla, H., Kundu, S., Jaiswal, D. and Chandra, K. 2023. Genetic evidence on the occurrence of *Channa harcourtbutleri* [Annandale, 1918] in Eastern Ghats, India: first report from mainland India. *Journal of Threatened Taxa*, 15[3]: 22834–22840 <https://doi.org/10.11609/jott.6894.15.3.22834-22840>
16. Pathania, P.C., Katewa, A. and Sood, R. 2023. Taxonomic studies on three species of genus *Asota* Hübner [Erebidae: Lepidoptera] from Himachal Pradesh, India. *Biological Forum-An International Journal*, 15[2]: 1097-1100.
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18. Rameshkumar, A., Anand, N., Sardar, S. and Kazmi, S.I. 2023. First report of the fairyfly *Schizophragma mitai* Triapitsyn [Hymenoptera: Mymaridae] from India with notes on *S. indica* Rehmat & Anis. *Journal of Threatened Taxa*, 15[2]: 22752–22756.
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20. Roy Chowdhury, B., Singh, P., Tudu, A.K., Rath, S. and Kosygin, L. 2022. First record of the bagrid catfish *Olyra parviocula* from West Bengal, India. *National Journal of Life Sciences*, 19[1&2]: 71-73.
21. S. Rajendra, S.S. Mishra, C. Raghunathan & Tamal Mondal, 2023. Pisces (In – Faunal Diversity of Puducherry, 281-316, Published by the Director, Zool. Surv. India, Kolkata).
22. Saikia, B., Laskar, M. A., Dinesh, K. P., Shabnam, A. and Sinha, B. 2022. Description of two new species of *Amolops* [Anura: Ranidae] from Arunachal Pradesh, Northeast India under the morphological 'Viridimaculatus species group'. *Records of the Zoological Survey of India*, 122[3]: 247-266.
23. Saikia, B., Sinha, B., Laskar, M. A., Shabnam, A., and Dinesh, K. P. [2022d]. A new species of *Amolops* [Anura: Ranidae] from Sessa Orchid Sanctuary, Arunachal Pradesh, Northeast India. *Records of the Zoological Survey of India*, 122[3]: 303-322.
24. Sreedhina, S., Smija, MK., Palot, M.J., Joseph, J E., Sruthi, R. and Prasad, P.K. 2023. Breeding and Foraging ecology of nesting Blue-tailed Bee-eater, *Merops philippinus* in Kannur district, Kerala, India. *Advances in Life Science Research*, 11[2]: 41-46.
25. Sreeraj, C.R., Sheethal, S.K., Sharbin, K.M.S., Sen, A. and Limna Mol, V.P. 2023. First Report on the Occurrence of Five Mangrove-Associated Fishes from Kerala, India. *Thalassas: An International Journal of Marine Sciences*, <https://doi.org/10.1007/s41208-023-00539-4>
26. Sudhin P.P., Sen S., Caleb J.T.D. 2023. New species and records in the genus *Phintella* Strand, 1906 [Araneae: Salticidae: Chrysillini] from India. *Arthropoda Selecta*, 32[1]: 80–88.
27. Surachita, S., Roy Chowdhury, B. and Palita, S.K. 2023. *Garra laishrami*, a new species of cyprinid fish (Teleostei: Cyprinidae) from the Godavari River drainage, Eastern Ghats of Odisha, India. *Ichthyological Exploration of Freshwaters / IEF-1179*/pp. 1-9. DOI: <http://doi.org/10.23788/IEF-1179>

POPULAR ARTICLES

1. Saikia, B. 2023. Future of Mankind: Vibrant Earth or Environmental Apocalypse, *The Shillong Times*, on 12th March, 2023. <https://theshillongtimes.com/2023/03/12/future-of-mankind-vibrant-earth-or-environmental-apocalypse/>
2. Vinod, K., Ashokan, P.K., Joshi, K.K., Zacharia, P., Varghese, M., Jasmin, S., Palot, M.J. & Gopalakrishnan, A. 2023. Kadalundi Vallikunnu Community Reserve: Jaiva Vividhyavum Susthira Paripalanavum. [About Biodiversity and sustainable development of Kadalundi – Vallikunnu Community Reserve]. *Aranyam*. [An official Magazine of Kerala Forests & Wildlife Department]. Vol. 43 [7]: 26-31.

MEETINGS ATTENDED

1. Dr. A.S. Kalawate, Scientist-E attended an Animal Expert committee meeting of the MSBB on 13th March 2023 and evaluated 20 research proposal received by the committee. She co-authored a poster titled "Occurrence of *Oryctes rhinoceros* [Linnaeus, 1758] and *Holotrichia serrata* [Fabricius, 1781] [Coleoptera, Scarabaeidae] in Junnar, Pune" presented at International Symposium on Sustainable Environment and Smart Technology, attended an IS research seminar titled "Encouraging Eco-Driving with Post-Trip Visualized Storytelling: An Experiment Combining Eye-Tracking and a Driving Simulator" by Prof. Ben Choi on 7th March 2023 organized by IIM, Bangalore.
2. Dr. Anil Mohapatra, Scientist-E, EBRC, Gopalpur-on-Sea, attended the meeting of Department Research Committee, Department of Zoology, Utkal University, Vani Vihar, 2022-2023 as an External Member on 6th March, 2023 and attended Research Advisory Committee, Berhampur University as an external member on 11th March, 2023.
3. Dr. Avtar Kaur Sidhu, Scientist-E & Officer-in-Charge, HARC, Solan, attended the virtual meeting with DZSI as organizing committee member of 'Animal Taxonomy Summit 2023 [ATS 2023]' held on 1st March, 16th March, 2023 and 28th March 2023 at Baini Prasad Hall, through hybrid mode, attended the virtual meeting with the taxonomy committee as member to evaluate taxonomy abstracts for 'Animal Taxonomy Summit 2023 [ATS 2023]' on 6th, 16th & 17th March 2023.
4. Dr. B Sinha, Scientist-E, NERC, Shillong, attended the meeting with GIZ officials held at ZSI/HQ Kolkata virtually on 3rd March 2023.
5. Dr. B. Tripathy, Scientist-E & Officer-in-Charge and Dr. S. S. Talmale, Scientist-C attended Inter Agency Co-ordination Meeting organized by Wildlife Crime Control Bureau, Western Region, Mumbai in the office of the Chief Conservator of Forests, Van Bhavan, Thane on 28th February 2023.
6. Dr. B. Tripathy, Scientist-E & Officer-in-Charge, attended Animal Taxonomy Summit (ATS) meeting on 28th March 2023, attended a meeting on scrutiny of APR proposal on 28th March 2023 on virtual mode with Headquarter.
7. Dr. C. Sivaperuman, Scientist-E & Officer-in-Charge, ANRC, Port Blair, attended meeting with the Chief Secretary, Shri. Keshav Chandra, Andaman and Nicobar Administration in connection with the NCRRI Land on 14th March 2023, attended meeting with the Deputy Commissioner, South Andaman Mrs. Vedita Reddy, in connection with the NCRRI Land on 14th March 2023, attended the meeting of the High Level Committee to monitor the works undertaken by Andaman and Nicobar Islands Integrated Development Corporation (ANIIDCO) for Sustainable Development in Great Nicobar Islands regarding diversion of forest land under the Chairmanship of DG Forests & Special Secretary, Ministry of Environment, Forest and Climate Change on 15th March 2023, attended meeting of the Animal Taxonomy Submit on 16th March 2023, organized and attended Doctoral Committee Meeting at ZSI, Port Blair on 17th March 2023.
8. Dr. Deepa Jaiswal, Scientist-E & Officer in Charge and Karuthapandi M, Scientist-D, FBRC, Hyderabad, attended Andhra Pradesh State Biodiversity Board meeting on 28th February 2023 at Vijayawada.
9. Dr. G.P. Mandal, Scientist –E & HOO, ZSI/HQ, Kolkata, attended to all the official meetings at ZSI/HQ during the month.
10. Dr. Gopal Sharma, Scientist-E & Officer-in-Charge, GPRC, Patna, attended the Gazetteer meeting in the DM Office Patna on 1st March 2023.
11. Dr. L. Kosygin Singh, ZSI/HQ, Kolkata, presented the research findings of the project entitled "Diversity, Distribution and Status of Freshwater Fishes of Jaldhaka River, West Bengal, India" in the RAC meeting of the West Bengal Biodiversity Board, Department of Environment, Govt. of West Bengal on 14th March, 2023.
12. Dr. Md. Jafer Palot, Scientist-B attended a Research Advisory Committee meeting at the Conference Hall of Goa, Van Bhavan, Altinho, Panaji on 27.03.2023 and presented the final report of Important Bird Areas of Goa and the Important Coastal Marine Biodiversity Areas of Goa.
13. Dr. P. Girish Kumar, Scientist-D, WGRC, Kozhikode, attended one online meeting in connection with Ph.D. Admission Reservation Roster of University of Calicut conducted by the Directorate of Research, University of Calicut on 9th March 2023.
14. -Dr. Souvik Sen, Scientist-D, ZSI/HQ, Kolkata, attended the Status review meeting of NMHS-funded Projects [Ongoing and Completed] implemented by Zoological Survey of India [ZSI] on 2nd March 2023 at ZSI, Hqs. Kolkata, attended the Meeting with GIZ Officials on 3rd March 2023 at ZSI, Hqs. Kolkata, attended the virtual meeting [through videoconferencing] under the Chairmanship of Shri Tanmay Kumar, Addl. Secretary, MoEF&CC, New Delhi regarding 'Mission Karmayogi' on 4th March 2023, attended the virtual meeting [through videoconferencing] under the chairmanship of Joint Secretary, MoEFCC to discuss the issues related to ZSI and BSI on 6th March 2023, attended the Annual Assessment of Research Scholars of ZSI as a member on 9th and 10th March 2023 at ZSI, Hqs. Kolkata.

15. Dr. Tamal Mondal, Scientist-D, ZSI/HQ, Kolkata, attended a meeting with GIZ Officials on 3rd March 2023 at Bains Prasad Hall, attended the virtual meeting under the Chairmanship of Shri Tanmay Kumar, Addl. Secretary, MoEF&CC, New Delhi on 'Mission Karmayogi' on 4th March 2023, attended 'Progress Evaluation Meeting' of JRFs, SRFs and PDFs on 9th and 10th March, 2023, attended Biodiversity Sectional Committee, SSD 20 on 16th March 2023 virtually, attended a meeting related to GEF opportunities on 21st March 2023 at Bains Prasad Hall, attended a meeting to discuss 'NERAQ Collaboration ZSI and IFB on Vulnerability Assessment' on 29th March 2023 at Bains Prasad Hall.

TRAININGS ATTENDED

1. Three officers and 11 staff members from CZRC, Jabalpur participated in the 25 working days Hindi Bhasha Prabodh training course from 13th February to 20th March, 2023 and given the two part exam on 21st March for the same organized by Hindi Teaching Scheme, Department of Official Language, Ministry of Home Affairs, GoI at CZRC, ZSI through online mode.
2. Dr. Aditya Kapil Valiveti, Scientist – C, MARC Digha participated and attended an one day webinar on "Unpacking freshwater role: Climate mitigation measures in land system" organized by Swedish Water House, SIWI on 30th March 2023.
3. Dr. Gaurav Sharma, Scientist-E and Officer-in-Charge, NRC, Dehradun, participated in the "Consultation Workshop on GEF-7 Project- Strengthening conservation and resilience of globally significant wild cat landscapes through a focus on small cat and leopard conservation" organized by Global Tiger Forum, New Delhi at Dudhwa Tiger Reserve, Uttar Pradesh from 10th and 11th March 2023. He also participated in the "International Workshop on Enhancing Ecosystem Services and Carbon Sequestration by improving Forest Quality and Productivity, and SLEM Knowledge Dissemination" organized by Indian Council of Forestry Research and Education at Dehradun from 22nd to 24th March 2023.
4. Dr. K.K. Bineesh, Scientist-E, MBRC, Chennai, participated in one online workshop on the Use of Fish Maws – Implications for Species, Fisheries, People and Sustainability during 21st March to 23rd March 2023 conducted by SFACT, London, UK.
5. Mrs. Florence Suganya, Senior Zoological Assistant, MBRC, Chennai, virtually attended a lecture short course on "Introduction to Heterobranchia" during 20th March and 21st March 2023 conducted by Dr. Rahul Mehrotra, ATMEC, by Love Wildlife Foundation, Bangkok, Thailand.
6. Dr. C. Sivaperuman, Scientist-E & Officer-in-Charge, ANRC, Port Blair, attended International Women's Day Seminar organized by Andaman Law College, Port Blair on 10th March 2023.
7. Dr. J.S. Yogesh Kumar Participated in three days Workshop and Training entitled "SAAP BANCHAO MANUSH BANCHAO" on 17th to 19th March 2023.
8. Dr. Sreeraj C.R., Scientist-D, WGRC, Kozhikode, inaugurated the butterfly garden at Government Vocational Higher Secondary School, Atholi, Kozhikode and delivered a lecture on "Importance of butterfly gardens" on 6th March 2023.
9. Dr. SD. Gurumayum, Scientist- E attended two-days Workshop on "Regional Assessment of the IUCN Red List status of freshwater fishes from selected Northeast states of India" organized under the Indo-German bilateral project "NERAQ" [Protection and Sustainable Management of Aquatic Resources in the North-eastern Himalayan Region of India], Manipur University from 21st to 22nd March 2023.
10. Dr. Gopal Sharma, Scientist-E & Officer-in-Charge, GPRC, Patna, attended a workshop entitled Socio-Economic Perspective for India's Next Few Decades 16th and 17th March, 2023, organized by Asian Development Research Institute Patna.
11. Shri Manish Chanfra Patel, Assistant Zoologist, attended one-day Regional workshop on "National Aquifer Mapping and Management (NAQUIM) Programme" Organised by Central Ground water Board [CGWB] Mid-Eastern Region, Patna on 17th March 2023.

LECTURES DELIVERED

1. Dr. A. Gokul, Scientist-B, EBRC, Gopalpur, delivered lecture on “Arthropods with special reference to Brachyuran crab” intraining and capacity building programme on DNA barcoding of marine and estuarine isopods and their host fishes organized by Brahampur University, Odisha on 25th March 2023.
2. Dr. Anil Kumar, Scientist-E, NRC, Dehradun, delivered a talk for about 20 M. Sc. students and three faculty members from Shoolini University, Solan on 22nd March 2023.
3. Dr. Anil Mohapatra, Scientist-E & Officer-in-Charge EBRC, Gopalpur, delivered an online lecture on “Marine Biodiversity and Conservation” for the Refresher course in Bioscience conducted by Himachal Pradesh University, Shimla on 17th March 2023 as a resource person.
4. Dr. Archana Bahuguna of NRC, Dehradun, delivered a lecture on Wildlife forensic and Herpetofauna to the students of Shoolnee University, Solan, Himachal Pradesh.
5. Dr. Avtar Kaur Sidhu, Scientist-E & Officer-in-Charge, HARC, Solan, acted as resource person and guest of honor in workshop on “Role of Faunal Diversity for sustainable environment” held at DRC, ZSI, Jodhpur and delivered invited lecture on “Conservation of rare and endemic fauna of Cold Deserts of India on 20th March 2023, delivered a lecture on “Faunal Diversity of Trans-Himalayan Region of India” on 7th March 2023 and interacted with the participants for discussion in the 90 minutes session.
6. Dr. B. Sinha, NERC Shillong, delivered an invited lecture entitled “Faunal diversity of Meghalaya: status and gaps” in the workshop organised by SCSTE, Meghalaya on 30th March 2023.
7. Dr. B. Tripathy, Scientist-E & Officer-in-Charge, attended and presented a key note address at National conference on Advances in Biodiversity Conservation & Sustainable Development: Educational & Scientific Research Perspective organized by the Department of Life Sciences and Science and Innovation Centre of Shri. Shivaji Science College, Amravati, Maharashtra on 3rd and 4th March 2023.
8. Dr. C. Sivaperuman, Scientist-E & Officer-in-Charge, ANRC, Port Blair, delivered a talk on Antarctica: A Journey through everlasting ice on 18th March 2023 in the online platform Mind your Mind, attended and delivered a talk in the G20 University Connect Engaging Young Minds [Lecture Series] on 31st March 2023 at Pondicherry University, Port Blair organised by Research and Information System for Developing Countries [RIS], Ministry of External Affairs, Government of India.
9. Dr. D. S. Suman, Scientist-E, EBRC, Gopalpur, delivered lecture on “DNA Barcoding and its role in resolving of cryptic species” intraining and capacity building programme on DNA barcoding of marine and estuarine isopods and their host fishes organized by Brahampur University, Odisha on 25th March 2023, delivered an online “Technology Transfer Talk on autodissemination technology” at Rutgers University, USA on 3rd March 2023.
10. Dr. Gaurav Sharma, Scientist-E & Officer-in-Charge, NRC, Dehradun delivered lecture on topic entitled “Conservation of Wildlife in India” to B.Sc. and M.Sc. students of Alpine Institute, Dehradun in the conference hall of ZSI, NRC, Dehradun on 3rd March 2023, delivered lecture on topic entitled “Faunal Diversity and their conservation in India” to two Faculties and 38 B.Sc. [Hons] Horticulture Final Year students from College of Horticulture & Forestry, Central Agricultural University, Pasighat, Arunachal Pradesh in the conference hall of ZSI, NRC, Dehradun on 14th March, 2023, delivered lecture on topic entitled “Status of Faunal Diversity and their conservation in India” to the three faculties and 20 M.Sc. students from Department of Zoology, Shoolini University, Solan, Himachal Pradesh at ZSI, NRC, Dehradun on 23rd March 2023.
11. Dr. Gopal Sharma, Scientist-E & Officer-in-Charge, GPRC, Patna delivered a lecture on Macro fauna of Bihar in Bihar State Pollution Control Board Patna on 3rd March 2023, on Water Crisis and Conservation at Shri Krishna Science Center, Patna on water day 22nd March 2023, on Water our future at Patna women’s College Patna on 23rd March 2023, on Gangetic Dolphin an Ecosystem Indicator at Education Department Pavilion in Bihar Diwas 2023 on 24th March 2023.
12. Dr. K.P. Dinesh, Scientist-E presented a Lead Presentation talk at International Symposium organized by Prof. Ramakrishna More, Arts, Commerce & Science College at Yashada auditorium, Sakalnagar, Pune on 10th March 2023 on the theme ‘International Symposium on Sustainable Environment & Smart Technology’ and delivered a talk on “Trends in Integrative Taxonomy – Amphibians as model system”.
13. Dr. Md. Jafer Palot, Scientist-B delivered a lecture on the “Fauna of Kerala and its conservation” to the Bhoomi mitra club students of NSS College, Manjeri on 8th March 2023 at Tholpetty organized by Wayanad Wildlife Sanctuary, he delivered a lecture on the “Indian Wildlife [Protection] Act and Faunal wealth of Kerala” for the Beat Forest officer

trainees of State Forest Training Institute, Walayar, Palakkad district Kerala on 9th March 2023, he also delivered a lecture on the "Indian Wildlife [Protection] Act and Faunal wealth of Kerala" to the front-line staffs of Munnar Wildlife Division at Eravikulam National Park on 15th March 2023.

14. Dr. Narender Sharma, Scientist-E of NRC, Dehradun, delivered a lecture on the topic "Taxonomy and its importance" to graduate and post-graduate students of Shoolini University, Solan on 22nd March 2023.
15. Dr. P.C. Pathania, Scientist – E, HARC, Solan, delivered invited talk on the topic "Insect diversity and their economic importance" in the Refresher course on Biosciences being organized by Human Resource Development Centre, Himachal Pradesh University, Shimla on 16th March 2023, delivered invited talk on the topic "Insect diversity and recent climate change from North Western Himalaya" in the two days National Conference on "Sustainable Himalayas Environment: Challenges and Opportunities" organized by Department of Environmental Sciences, Himachal Pradesh University, Shimla on 20th March 2023.
16. Dr. S. S. Talmale, Scientist-C was invited as a resource person and honoured chairperson for a technical session in National conference on Advances in Biodiversity Conservation & Sustainable Development: Educational & Scientific Research Perspective organized by the Department of Life Sciences and Science and Innovation Centre of Shri. Shivaji Science college, Amravati, Maharashtra on 3rd and 4th March 2023.
17. Dr. U. Saikia, Scientist-D delivered popular talk on "The wonderful world of bats" given in the National Science day celebration organized by the Government of Meghalaya on 22nd March 2023.
18. Ms. Debashree Dam, Scientist-B, ZSI/HQ, Kolkata, participated and delivered a lecture on 'Healthy Mind and Body for Sustainable Environment' as an invited speaker at a one day workshop held at DRC, ZSI, Jodhpur on 20th March 2023.
19. Two Lectures delivered by Mrs. Pallabi Priyadarsini, Assistant Zoologist, CZRC, Jabalpur, on the theme "Reduction of Single use Plastic" as the part awareness program of Mission LiFE at Modern Science College, Jabalpur on 27th March 2023 and Sapient International School, Vijay Nagar, Jabalpur on 24th March 2023.



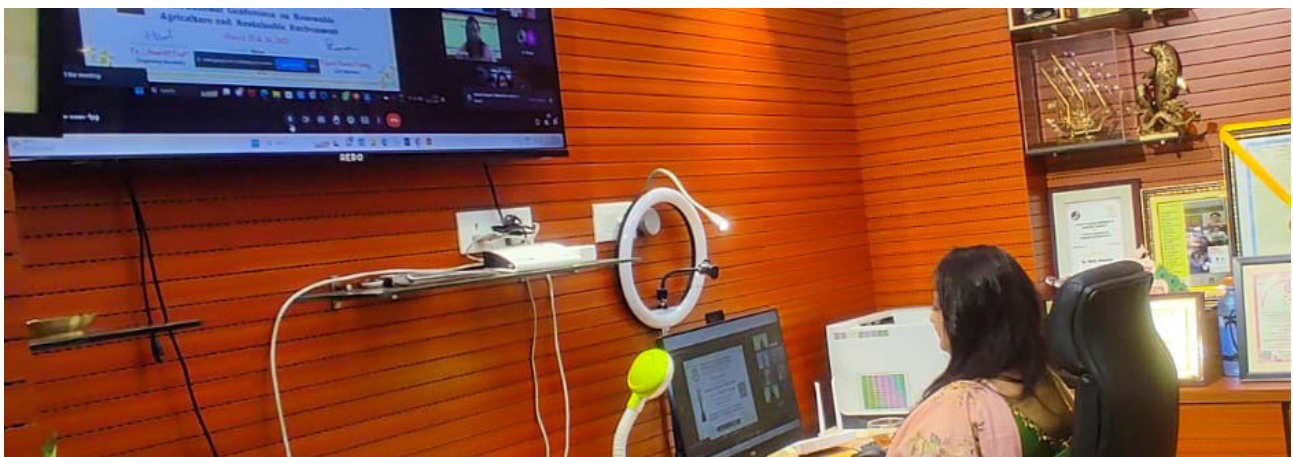
GALLERY



Glimpses of the workshop organized at DRC, Jodhpur on 20th March 2023



Glimpses of Workshop at DRC, Jodhpur



Felicitated by the Honorary Fellowship Award-2023 for her outstanding contribution in the field of Environmental Sciences on the occasion of International Conference on Renewable Agriculture and Sustainable Environment on 25th & 26th March, 2023 organised by Society of Biological Sciences and Rural Development (SBSRD), at Vigyan Parishad Prayag, Prayagraj, UP.



Received a Special Felicitation by Tega Industries Ltd., Kolkata on the occasion of International Women's day celebration on 4th March, 2023.



Attended the 77th Foundation Day of ICAR-CIFRI as a Guest of Honour on 17th March 2023 at the Institute Headquarters, Barrackpore. Fish farmers, progressive fishers, students, entrepreneurs, ornamental fish growers, SHGs, ICAR- Institutes in and around Kolkata participated in the programme.



Meeting with GiZ officials and ZSI Team involving NERAQ Project at ZSI Hqs. on 3rd March 2023



Celebrated International Women's Day



Audit Team, MoEFCC visit to ZSI Hqs. On 15th march, 2023.



Celebrated International Women's Day celebration themed "Meet the Achievers Programme" organised by Press Club, Kolkata and received a Special Felicitation on the occasion for her outstanding contribution and achievement in the field of science on 6th March, 2023.



Felicitated by the Honorary Fellowship Award-2023 for her outstanding contribution in the field of Environmental Sciences on the occasion of International Conference on Renewable Agriculture and Sustainable Environment on 25th & 26th March, 2023 organised by Society of Biological Sciences and Rural Development (SBSRD), at Vigyan Parishad Prayag, Prayagraj, UP.



Farewell of Shri Nirmal Chandra Halder, Shri Jamuna Ravi Das, Shri Mangal Nayak and Shri Narayan Mitra on 29th March 2023.