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 $\label{eq:cyrtodactylus} \textit{Cyrtodactylus nebulosus} \ (\text{Beddome, 1870}) - \text{Clouded Ground Gecko, Courtesy: } \\ \text{FBRC, Hyderabad}$ 

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### From the Director's Desk

Zoological Survey of India (ZSI), a premier organization under Government of India for zoological research and studies is constantly providing expertise on exploration and survey of faunal resources, taxonomic studies, survey of endangered species, environmental impact studies, etc. With its primary and secondary objectives, ZSI has been working as one of the important pillars of Ministry of Environment, Forest and Climate Change.

In the august presence of Dr Tamilisai Soundararajan, Hon'ble Lt. Governor, Puducherry, the book entitled *Faunal Diversity of Puducherry* was released at Raj Nivas, Puducherry. Various awareness programmes on Mission LiFE continued to be organized by ZSI (HQ and Regional Centres). Extensive and intensive field works were undertaken as part of several ongoing projects. As part of the Career Progression Mandatory Training for the Senior Zoological Assistants, a field trip to Sundarban was carried out in presence of senior scientists from ZSI. The field trip included sightings from watch tower Sajnenkhali, Sudhyanakhali and Dobanki and to Tiger Rescue Rehabilitation Centre at Jharkhali. As part of foundation day of BSI, several scientists attended the 2<sup>nd</sup> International Symposium on Plant Taxonomy, Ethnobotany and botanic gardens as delegates. For newly enrolled PhD candidates, enrollment certificates were handed over. Like preceding years, tagging of Olive Ridley turtle has been initiated on Odisha coast in February 2023 and 2629 turtles were tagged. It is pertinent to mention that, 130 turtles tagged during the year 2021 were visited again to Odisha coast for nesting in February 2023. The month witnessed by the identification of 1229 species, of which six species were new to science. Generation of 54 DNA barcodes and 26 publications and footfall of 15822 to ZSI facilities are worth mentioning. Under the Mission LiFE, different programmes have been organized by ZSI Headquarters and Regional Centres.

ZSI e-News is a significant platform to reach out to the readers with informative inputs about our working and significant achievements over the last one month.

With best wishes towards successful publication,

#### Dr. Dhriti Banerjee

Kolkata

2<sup>nd</sup> March 2023



### HEADQUARTERS, KOLKATA



Release of book 'Faunal Diversity of Puducherry' by Hon'ble Lt. Governor, Dr. Tamilisai Soundararajan at Raj Nivas Puducherry

Three surveys were conducted during the month, namely, Fauna of Bihar-Invertebrates, Fauna of Deccan Peninsula, and survey to Golden Quadrilateral. Total 4756 exs and 312 species were identified during the month, belonging to Apterygota, Platyhelminthes, Diptera, Nemathelminthes, Crusatacea, Mollusca, Arachnida, Hymenoptera, Orthoptera, Odonata, Mites and Paleozoological samples. Two new species of jumping spiders: Stenaelurillus megamalai Sudhin, Sen & Caleb, 2023 and Stenaelurillus neyyar Sudhin, Sen & Caleb, 2023 have been described from Agasthyamalai Biosphere Reserve, Western Ghats of India and two new species of Diptera: Eriozona (Megasyrphus) pseudohimalayensis Sengupta, Naskar and Banerjee, 2023 and Volucella kinnaurensis Sengupta, Naskar and Banerjee, 2023 have been described from Himachal Pradesh. In addition, 28 species comprising 2 species of barnacles, 10 species of brachyuran crabs, 2 species of anomuran crabs, 9 species of prawns and 5 species of lobsters were newly reported from Union Territory of Puducherry. Haplorchoides mystusi Gupta & Singh, 1986 (Phylum: Platyhelminthes, Class: Trematoda, Order: Plagiorchiida, Family: Heterophyidae, Genus: Haplorchoides Chen, 1949) & Tetracotyle srivastavai Agarwal & Khan, 1982 (Phylum: Platyhelminthes, Class: Trematoda, Order: Diplostomida, Family: Strigeidae, Genus: *Tetracotyle* de Filippi, 1854) and 10 species of soil & marine nematodes were augmented in NZCs. Preliminary identification report of the specimens documented from Gobardhanpur, Patharpratima, South 24 Parganas, West Bengal and sent to Director, Sundarban Biosphere Reserve by Paleozoology section. DNA isolation of 13 specimens belonging to 04 Dipteran families have been done during the month by Diptera Section. Career Progression Mandatory Training 2023 was organized from 24.01.2023 to 10.02.2023 for the benefit of the Senior Zoological Assistants of ZSI Headquarters and Regional Centres. Lok Sabha question No. 835 for 07/02/2023 regarding 'Extinction of Ornamental Fishes' submitted to the Ministry on 3rd February 2023. Proposal for Development of TechDome under Nav Bharat Udyan has been submitted to MoEFCC.



### NORTH EASTERN REGIONAL CENTRE, SHILLONG, MEGHALAYA

Sixty species belonging to Phylum Amphibia (4 spp.), Pisces (26 spp.), Dermaptera (4 spp.) and Aquatic Hemiptera (26 spp.) were identified. Identification of photographic samples of bat were provided to Defence Research and Development Establishment, Gwalior and Principal, Lady Keane College, Shillong.



## WESTERN REGIONAL CENTRE, PUNE, MAHARASHTRA

Scientists of the Centre have identified 135 species (1759 specimens) of different groups viz. Coleoptera, Lepidoptera, Odonata, Decapoda, Mollusca and Amphibia during the month. Two surveys conducted to Palakkad, Malappuram and Kozhikode districts of Kerala from 1st to 10th February 2023; and to Odisha coast from 10th



Dudhsagar Waterfall, Mollem National Park, Goa



Malabar Pied Hornbill Anthracoceros coronatus (Boddaert, 1783)

to 23rd February 2023. Four identification & advisory services rendered to different Range Officers of Maharashtra and one identification & advisory service rendered to the Principal Chief Conservator of Forests (Wildlife), Nagpur, Maharashtra on snakes of African origin for importing snakes from Africa.



# CENTRAL ZONE REGIONAL CENTRE, JABALPUR, MADHYA PRADESH

Ninety three species (484 specimens) of different groups viz. Coleoptera, Lepidoptera, Hemiptera, Mollusca, Pisces and Amphibia were identified during the month. A survey has been conducted for 12 days to Panna Biosphere Reserve from 20.02.2023 to 02.03.2023.

### NORTHERN REGIONAL CENTRE, DEHRADUN, UTTARAKHAND

Centre identified 81 species belonging to 08 faunal groups i.e. Protozoa, Phthiraptera, Orthoptera, Lepidoptera, Hymenoptera, Pisces, Amphibia and Reptilia. The Centre participated in "G20 Event- One Earth, One Family, One Future- 1st Environment & Climate & Sustainability Working Group Meeting" at Hotel Taj West End, Bengaluru, Karnataka from 09 to 11 February, 2023 to exhibit Fauna of High Altitude in the stall. The Officer-in-Charge and staff members conducted Awareness Campaign on Save Energy, Save Water and Plantation Drive in Dehradun on 27 February, 2023 under Mission Life.



Crimson Sunbird, Aethopyga siparaja (Raffles, 1822)



Visit of Ms. Nameeta Prasad, Joint Secretary, MoEFCC



Award to Dr. Gaurav Sharma by Dr. Durgesh Pant, Director General, UCOST, Government of Uttarakhand



### SOUTHERN REGIONAL CENTRE, CHENNAI, TAMIL NADU

Surveys conducted to Sathyamangalam Tiger Reserve to assess the status of Endemic Odonata of India in Nilgiri District, Tamil Nadu, and an another survey made along the proposed green field highway between Palakkad and Kozhikode, Kerala. Altogether 95 species comprising Ephemeroptera, Odonata, Lepidoptera, Plecoptera, Mollusca, Rotifera, Cladocera, Rhizopoda, Ostracoda, Amphibia, and Reptiles were identified. The scientists of this Centre carried out an inspection for the identification of birds at "Garuda Park," Pondicherry along with the Central Zoo Authority, Wildlife Crime Control Bureau, and Pondicherry Forest Department. Scientists and researchers presented posters in the "Wildlife – Annual Research Conference" on February 16 and 17, 2023, at the Advanced Institute for Wildlife Conservation (Research, Training, and Education), Vandalur, Chennai, Tamil Nadu, and reviewed manuscripts for an SCI journal.



Bos gaurus (Smith, 1827)

Mukurti National Park



### GANGETIC PLAINS REGIONAL CENTRE, PATNA, BIHAR

MoU was signed between Gangetic Plains
Regional Centre, Zoological Survey of India,
Patna, and Patna University in the presence of
Shri G. K. Chaudhry, Vice Chancellor, Kamesh
Kumar Singh, Patna University. A total of 677
examples comprising 29 species were identified.
A rally was organized by GPRC, ZSI Patna on
14th February, 2023 to sensitise to common
people and students to Conserve Water and
Energy at the Kanti Factory Road under Mission
Life. Rendered identification and advisory
services to ARS Dharwad, UAS Dharwad on
scale insects of Cotton.



Participated in Asian Water Bird Censes organized by Forest Department, Government of Bihar



### GPRC, ZSI, PATNA SIGNED MoU WITH PATNA UNIVERSITY



अब पीयू के शोधार्थी जेडएसआई की प्रयोगशालाओं का कर सकेंगे उपयोग

छात्र-छात्राएं जनाजिकल मर्वे ऑफ इंडिया के वैज्ञानिको के सह निर्वेशन में शोध कोंगे एवं लिखेंगे धीसिस

### छात्र जूलॉजिकल सर्वे ऑफ इंडिया के साथ करेंगे शोध | जुलोजिकल सर्वे ऑफ इंडिया एवं पटना विश्वविद्यालय के साथ

### पटना विवि

पटना, बरोब संबाददाता। पीच् और जुलाजिकल सर्वे ऑफ इंडिया (पर्णावरण बन एवं जलवाब परिवर्तन मंत्रालय, भारत सरकार) के बीच बुधवार को एमओबु पर हरताक्षर हुउत। इससे शोधार्थियों के लिए एक नई राह खुल गई है। अब पटना विवि के शिक्षक व शोधार्थी प्राणि शास ,पर्यावरण एवं अलवायु से जुड़े विषयों पर शोध करने में जलाजिकल सर्वे ऑफ डॉडवा के वैज्ञानिकों और प्रयोगशालाओं का उपयोग कर सर्कने।

के लिए उपलब्ध संसाधन का उपयोग - इंडिया के बीच एमओबू पर हस्ताधर

#### शोध कार्यों में तेजी आएगी

जुतरितकत सर्वे के देशानिक भी पीयू के पीएवडी साम्रों के की-सुरियाइजर दन सकते हैं। एमओय सं पटना विवि के शीध कार्यों में तेजी आरगी। तोध के प्रति रुड्डन भी बढ़ेगा। हाल के दिनों में विदि के कई रिक्कों ने अलय-अलग शीध एजेंसी में कई प्रोजेक्ट के लिए अवेदन किए हैं। इसमें कई विश्वकों को अन्छ प्रोजेन्ट भी हैं। वर्षी विवि ने तीय करने वाले शिक्षकों तमें पांच सारह रुपये देने की वीचाव की है।



 पटनाविविव जुलाजिकल सर्वे
 दोनों संस्थानों के शोधार्थी ऑफ इंडिया के बीच एमओयू पर हुआ हस्ताक्षर

होंगे लामान्वित, शोध के लिए लैब का कर सकेंगे उपयोग

करने का मौका मिलेगा। कुलपति प्रो. किया गया। एमओपू पा हस्ताक्षर पटना पर पीयु के प्रतिकुलपति प्रो. अज उपना वर सकत। जुलाजिकता सर्वे और रहित्र के गिरागुक्तागा चीपाने केतृत्वाम मेराना विशेष को ओ से कुस पण्टित कर्मना मिल, प्रे. असित कुमार, प्रे. राजनी चीर्ताकों को भी पटना विशेष के शोधा विशेष और जुलाजिकता सर्थे और क्योंग कुमार, और चैतानिक डॉ. कुमार, प्रो. असके मेहला औ गोपाल प्रसाद ने किया। इस अवसर वैज्ञानिक मनीव पटेल उपस्थित हो।

## समझौता ज्ञापन (एम० ओ०यु०) पर किया गया हस्ताक्षर

पटना। जुल्हेकिकत् सर्वे ऑफ इंडिया: पर्यावरण, वन एवं स्टाबल् परिवर्तन मंत्रातय (भारत सरकार)





# HIGH ALTITUDE REGIONAL CENTRE, SOLAN, HIMACHAL PRADESH

Fifty two faunal species containing Lepidoptera, Trichoptera and Pisces were identified. DNA isolation was done for 10 samples, and PCR products of 26 samples were sent for sequencing. Identification and Advisory services were rendered on Lepidoptera to Punjabi University, Patiala; Lovely University, Jalandhar; Department of Entomology, School of Agricultural Sciences and Rural Development (SASRD), Nagaland University and Govt. PG College, Dharampur, Mandi, Himachal Pradesh. Research papers reviewed for the Records of the Zoological Survey of India, Biological Forum-An International Journal, European Journal of Medicinal Plant and Indian *Journal of Ecology*. Under the programme Mission LiFE launched by the Government

of India, on the theme Reduction of waste and waste management, and celebrated the WETLAND DAY on 02–02–2023, the awareness rally was organized at Sadhupul (Solan) near Ashwini stream. Organized an awareness rally, interacted with villagers, Shopkeepers, B.Ed. and D.Ed. trainers of the Himachal Institute of Education, Jatoli (HP) on 15<sup>th</sup> February 2023 to enlighten about the sustainable food system theme under the Mission LiFE.



Cleaning near Ashwini stream by staffs of ZSI, Solan

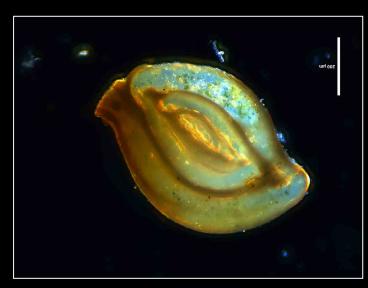


Visit to Soil Waste Management Plant, Solan



# MARINE BIOLOGY REGIONAL CENTRE, CHENNAI, TAMIL NADU

Three surveys conducted to U.T. of Lakshadweep under the externally funded project, Conservation Management of Lakshadweep Coral reefs – Long-term Monitoring programme and to Kasimedu and Pattinapakkam fish landing centers in Chennai, and for 'Status survey on Nilgri Marten, Nilgris Western Ghats of Tamil Nadu'. A total of 63 species were identified which include Marine Sponges 15 species, Foraminifera o<sub>4</sub> species, Gastropod o<sub>7</sub> species, Bivalvia 13 species Echinoderms 03 species and Fishes 21 species. identification & advisory service provided to Sakshi Bajhal, SRM institute of Science and Technology, Chennai and to Aasha Biochem,



Miliammina fusca (Brady, 1870)



Vatakara, Kerala. One species of Brachyuran crab *Arcotheres Alcocki* (Rathbun, 1909) has been reported for the first time from India.



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

Two long term surveys have been conducted to Great Nicobar Island and its adjoining islands during 1st to 28th February 2023; North Andaman and its adjoining Islands during 25th to 28th February 2023 to study the terrestrial and marine faunal diversity; 24 days local field surveys were conducted to South Andaman (Ograbrach, Kalatang, Shoal Bay, Shoal Bay 16, Chidiyatappu Reserve Forests, Sippighat and Airport campus) to study the terrestrial faunal diversity.

A total of 223 species were identified comprised of Fishes - 36 species; Mollusca - 25 species; sponges - 5 species from the marine environment; Arachnida 27 species; Lepidoptera - 48 species; Odonata - 6 species; Aves - 76 species from the terrestrial environment. One species and four specimens of confiscated Mollusca to the Department of Environment & Forests, Andaman & Nicobar Islands were identified.



Echinometra mathaei de Blainville 1825



Andaman Black Woodpecker Dryocopus hodgei (Blyth, 1860)



Fromia indica Perrier 1869



# SUNDERBAN REGIONAL CENTRE, CANNING, WEST BENGAL



Visit of Director, ZSI

Four days local surveys were undertaken on 4th, 10th, 11th, 25th February 2023 for threatened Herpetofaunal status assessment in Sunderban Biosphere Reserve. 31



Crocodylus porosus Schneider, 1801

species were identified containing 19 spp. of Mollusca and 12 spp. of fishes. Two manuscripts reviewed, one for JOTT and one from JKAU-MARSCI.



# FRESHWATER BIOLOGY REGIONAL CENTRE, HYDERABAD, TELANGANA

Conducted field survey to Smart cities of Andhra Pradesh from 31st January to 15th February 2023. Identified 44 species of Aquatic Coleoptera, 20 species of Aquatic Hemiptera, 7 species of Ostracoda, 10 species of Branchiopoda, 12 species of Mollusca, 2 species of Crab, 9 species of Reptilia, and 24 species of fishes during the month of February. One day interactive session on "World Wetland Day" observed on the theme of "It's time for wetland restoration" on 2<sup>nd</sup> February

2023 was organized. Chief Guest of the programme Shri C. Achleder Reddy, IFS, Chairperson, NBA, Chennai enlightened the students about importance of wetlands. Mission LiFE programme was also organized on 17<sup>th</sup> February 2023 for various College students. 11 sequences have been submitted to NCBI.



Mission LiFE Programme



### WESTERN GHAT REGIONAL CENTRE, KOZHIKODE, KERALA

Ten days faunistic survey to tea plantations of Idukki district, Kerala was conducted from 23.01.2023 to 01.02.2023. Total 37 species from survey and 65 species of backlog collection identified. The centre participated in the Kerala Science Congress held at Mar Baselios Christian College, Kuttikkanam, Idukki, Kerala during 10 to 14 February 2023. The Centre participated in the exhibition conducted as a part of seed festival by the District Biodiversity Board in Kartikulam, Wayanad district, Kerala during 10 to 12 February 2023. Three sequences (two COX gene; one 16S gene) of mammals have been generated which were received from Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram. Reviewed one paper for the ENTOMON Journal and for the journal Records of Zoological Survey of India. Identified four horns of *Oryx* sp. and report has been sent to the Department of Customs (Preventive), Air Intelligence Unit, Cochin International Airport. Cochin. As directive of Forest department, Kozhikode, a washed ashore carcass of Indo-Pacific Finless Porpoise

(*Neophocaena phocaenoides*) buried at the WGRC campus in order to preserve the skeleton during July 2022, which has been exhumed on 20 February 2023 for further preservation. Biodiversity assessment of Palakkad-Kozhikode green-field highway was conducted from 1-7 February 2023. The cleaning of office campus was done on 24 February 2023 as part of Mission LiFE and Azadi ka Amrit Mahotsav.



Idukki Tea Plantation Survey



ZSI WGRC team at Kerala Science Congress



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

During the month, 2629 turtles were tagged and more than 130 tagged turtles, from the earlier tagged ones were recaptured. A combined survey on "Current Status of Faunal Diversity of Bahuda, Devi & Nuanai Estuarine, Backwaters and Mangrove Ecosystems, Odisha" and Long term monitoring of Olive Ridley turtles was conducted from 11<sup>th</sup> – 23<sup>rd</sup>, February, 20 23. During the survey several mammal species including

fishing cat, jungle cat, otters, striped hyna, golden jackal, civet cat, spotted deer etc. were captured in the camera trap, deployed in the mangrove areas. Another survey conducted from 2<sup>nd</sup> to 11<sup>th</sup> February to Kolkata under NIV collaborated project. Seven DNA barcodes belonging to 7 species were uploaded in the NCBI data base. *Stolephorus mercurius* Hata *et al.* 2021 was reported for the first time from Indian Ocean.



Fishing cat in trap camera



Mass nesting



# ARUNACHAL PRADESH REGIONAL CENTRE, ITANAGAR, ARUNACHAL PRADESH

A total of 92 species including Lepidoptera 61 spp., Orthoptera 13 spp., Coleoptera 2 spp., Hemiptera 1 sp., Pisces 9 spp. & Amphibia 06 spp. were identified during the month. An awareness campaign on LiFE-Creatives on Conservation of Water and Conservation of Energy was organized among students of Department of Zoology, Himalayan University, Jullong, Itanagar Capital-Complex on 15<sup>th</sup> February, 2023. Organized a Seminar on Biodiversity of Arunachal Pradesh on National Science day at Himalayan University, Itangar under the Mission LiFE programe on 28th February 2023.



Scientist of ZSI, APRC, Itanagar with Vice Chancellor Himalayan University, Dr. Kuldeep Krishan Sharma



Awareness campaign at Himalayan University, Itanagar, Arunachal Pradesh



# MARINE AQUARIUM AND REGIONAL CENTRE, DIGHA, WEST BENGAL

Thirteen days [13<sup>th</sup> – 25<sup>th</sup> February 2023] survey conducted at different localities of Kerala, Karnataka and Goa coasts. Altogether, 206 species belonging to Mollusca (52 spp.), Crustacea (33 spp.), Fishes (95 spp.), Polychaetes (09 spp.), Cnidaria (04 spp.) and Echinodermata (03 spp.) were identified. Total 22 samples of gDNA and 34 PCR products for polychaete and 01 samples of gDNA and 05 PCR products for molluscs were amplified. Reviewed two manuscripts for *Bulletin of Marine Science* and *Thalassas: An International Journal of Marine Sciences* and evaluated one Ph.D. thesis for PG and Research Department of Zoology, Pachaiyappa's College, affiliated to University of Madras. Identification and advisory services rendered to for National Centre for Coastal Research, Chennai for estuarine micro-molluscs. Conducted awareness programme on "Conserve water" at Digha beach on February 20, 2023 as a part of Mission LiFE initiative. As a part of Swachh Bharat Mission and Special Campaign 2.0, officers and staff members actively participated in the cleaning of various parts of ZSI, MARC, Digha campus on February 21, 2023.



Saccostrea cucullata (Born, 1778)



Volegalea cochlidium (Linnaeus, 1758)



Hecuba scortum (Linnaeus, 1758)



### **NEW DISCOVERIES**

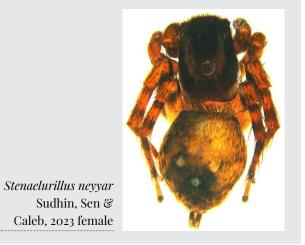
### **NEW SPECIES**



Stenaelurillus megamalai Sudhin, Sen & Caleb, 2023 female



Stenaelurillus megamalai Sudhin, Sen & Caleb, 2023 male



Stenaelurillus neyyar Sudhin, Sen & Caleb, 2023 male





Vela bandhavya Pati, Bajantri & Hegde, 2023



Omorgus (Omorgus) khandesh Strümpher ℰ Kalawate, 2023



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#### MEETINGS ATTENDED

- Dr. Dhriti Banerjee, Director, Zoological Survey of India, organised a Field Visit to Sundarban Tiger Reserve as part of Career Progression Mandatory Training (CPMT) of Sr. Zool. Assistants for study and observation from 1st-3rd February 2023 including 25 Participants; certificate distribution to PhD o7th DZSI Felicitation by Sr. Zool. Assistants, CPMT on o8th February, 2023; addressed the valedictory session of Career Progression Mandatory Training (CPMT) of Sr. Zool. Assistants on 10th February, 2023; attended meeting regarding Filling up of vacancies and GLIS in respect of M/o EF &CC and its various organizations under the Chairmanship of Additional Secretary on 10.02.2023; attended 2<sup>nd</sup> International Symposium on Plant Taxonomy Ethno-Botany and Botanic Gardens ISPTEBG-2023) organised by Botanical Survey of India, Kolkata on 13th and 14th February, 2023 at Bhasa Bhawan, National Library, Kolkata; visited Puducherry University in connection with the Book Releasing Function held on 17th February, 2023 at Raj Niwas, Puducherry. Hon. Lt Gov of Puducherry, Dr. Tamilisai Soundararajan released the book "Faunal Diversity of Puducherry" at Raj Niwas, Puducherry. On the occasion of Book release Director, ZSI felicitated the Honorable Lt. Governor of Puducherry and the Vice Chancellor of Pondicherry University; attended the 29th Convocation of Pondicherry University as a special invitee on 28th February 2023 held at Jawaharlal Nehru Auditorium, Dr. B R Ambedkar Administrative Building; his Excellency the Vice-President of India and Chancellor of Pondicherry University Shri Jagadeep Dhankhar has kindly consented to be the Chief Guest and delivered the Convocation Address and inaugurated the four new academic buildings.
- 2. Dr. C. Raghunathan, Scientist- F, attended the meeting chaired by the Chief Secretary, A & N Islands regarding Filing of replies to the case filed before NGT regarding GNI project held on 1st February 2023; chaired the meeting to assess the CSIR- JRF progress for the recommendation of SRF in Coleoptera Section, ZSI headquarters on

- 3<sup>rd</sup> February 2023; replied for the admitted Lok Sabha question No, 835 for 07/02/2023 regarding 'Extinction of Ornamental Fishes' submitted to the Ministry on 3rd February 2023; attended the 50<sup>th</sup> meeting of the Expert Committee (ESZ) to discuss the proposals for finalization of Eco-Sensitive Zone draft notifications is held on 7th February, 2023 at MoEFCC through VC mode; delivered a lecture on Sustainable Development Goals on 10th February 2023 in the "Career Progression Mandatory Training 2023" organized for the Sr. Zoological Assistants at ZSI Headquarters; attended the meeting with respect to implementation of integrated management plan for Dihang-Dibang Biosphere Reserve, Arunachal Pradesh held at MoEFCC, New Delhi on 13th February 2023; attended the meeting to discuss the draft Rules under Section 49M of the Wild Life (Protection) Act, 1972 held at MoEFCC, New Delhi 14<sup>th</sup> February 2023; attended the book release function at Raj Nivas, Puducherry on 17<sup>th</sup> February 2023 wherein the ZSI publication 'Faunal Diversity of Puducherry' was released by the Hon'ble Lt. Governor of Puducherry; chaired the meeting for assessment of CSIR JRF for the promotion of SRF on 20th February 2023; attended the 9th Meeting on Development of TechDome under Nav Bharat Udyan chaired by Principal Scientific Advisor, Government of India held on 24th February 2023 through VC mode.
- Dr. C. Sivaperuman, Scientist-E, ANRC attended Doctoral Committee Meeting at Department of Marine Biology and Ocean Studies, Pondicherry University, Port Blair on 14<sup>th</sup> & 24<sup>th</sup> February 2023; attended Doctoral Committee Meeting at Regional Medical Research Centre, Port Blair on 21<sup>st</sup> February 2023; attended book releasing function held at Raj Niwas, Puducherry under the Chairmanship of Hon'ble Lt. Governor, Puducherry Dr. Tamizhisai Soundararajan on 17<sup>th</sup> February 2023; attended 35<sup>th</sup> meeting of Court of Pondicherry University, Puducherry on 27<sup>th</sup> February 2023; attended 29<sup>th</sup> Convocation of Pondicherry University, Puducherry on 28<sup>th</sup> February 2023; attended meeting with Chief



- Secretary, ANI, and presented the book "Faunal Ecology and Conservation of Great Nicobar Biosphere Reserve on 23<sup>rd</sup> February 2023.
- Dr. B Sinha, Sci-E of NERC Shillong, attended the PBR quality monitoring meeting of Meghalaya Biodiversity Board on the 22<sup>nd</sup> Feb, 2023.
- 5. Dr. Deepa Jaiswal, Scientist E, FBRC Hyderabad attended virtual meeting regarding monitoring of Action plan for filling up of vacancies and GLIS organized by MoEF&CC on 10<sup>th</sup> February 2023 and Telangana State Wildlife Board Meeting on 13<sup>th</sup> Feb. 2023.
- Dr. V.D. Hegde, Scientist-E, WRGC interacted with NAAC Peer committee on 9<sup>th</sup> and 10<sup>th</sup> February 2023 as an alumni and presented a PPT during the interaction between NAAC peer committee and alumni of SDM College, Honnavar on 09<sup>th</sup> February 2023.
- 7. S.D. Gurumayum, G. Srinivasan, Ilona J. Kharkongor, and Temjenmongla, APRC attended the physical meeting with the Engineers of CPWD, Itanagar, held at APRC on 6<sup>th</sup> February, 2023, to review the Preliminary Layout & Drawings of the proposed EHFR, also had a discussion with Vice Chancellor Himalayan University, Dr. Kuldeep Krishan Sharma for collaborative research project on 15<sup>th</sup> February 2023 at Himalayan University, Itanagar, Arunachal Pradesh.
- 8. Dr. Suranjana Banerjee Assistant Zoologist attended the International Conference on "Technological Innovations in Animal Science Research and Social Transformation" at Utkal University, Bhubaneshwar 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, Dr.Banerjee received the award for best poster presentation in the Conference.
- Dr. Tamal Mondal, Scientist-D attended book releasing programme entitled 'Faunal Diversity of Puducherry' by Hon'ble Lt Governor of Puducherry at Raj Nivas, Puducherry on 17<sup>th</sup> February 2023.

- 10. Dr Anjum N. Rizvi, Scientist-E, Dr. Shelley Acharya, Scientist-E, Dr. Souvik Sen, Scientist-D and Ms. Debashree Dam, Scientist -B attended 2nd International Symposium on "Plant Taxonomy Ethnobotany and Botanic Gardens" from 13-14<sup>th</sup> February, 2023 at the National Library, Kolkata.
- Dr. Gopal Sharma Scientist E participated in an Asian Water Bird Censes on 12<sup>th</sup> and 13<sup>th</sup> February, 2023 organized by Forest Department, Government of Bihar.
- 12. Dr. M. E. Hassan, Scientist-E, Shri Manish Chandra Patel, Assistant Zoologist, GPRC, Patna attended meeting with District Magistrate in connection with finalization of Gazetteer of Patna, and to provide inputs about GPRC and its significant achievements.
- 13. Dr. Uttam Saikia, Sci-D of NERC, Shillong presented a paper in the international conference on "Climate change: Impact and resilience: organized by Assam Don Bosco University between 27-28<sup>th</sup> Feb, 2023.
- Dr. P. S. Bhatnagar, Scientist-E & Officer-in-Charge attended meeting with Shri Tanmoy Kumar, AS, MOEFCC on Vacancy position and GLIS On 10<sup>th</sup> February 2023.
- Dr. Sanjay D. Paunikar, Scientist-E attended meeting with Shri Tanmoy Kumar, AS, MOEFCC on Vacancy position and GLIS on 13<sup>th</sup> February 2023.
- 16. Dr. Basudev Tripathy, Scientist-E and Officer-in-Charge, along with Dr. S.S. Talmale, Scientist-C attended a meeting of IACM of WCCB, WR at Thane on 28th February 2023
- Dr. Anil Kumar, Scientist-E participated in the Management Effectiveness Evaluation field studies to Mussoorie Wildlife Sanctuary from 15<sup>th</sup> to 16<sup>th</sup> February, 2023.
- 18. Dr. Gaurav Sharma, Scientist-E and Officer-in-Charge, ZSI, NRC, Dehradun participated in "G20 Event- One Earth, One Family, One Future 1st Environment and Climate Sustainability Working Group Meeting" at Hotel Taj West end, Bangaluru, Karnataka from 9<sup>th</sup> and 11<sup>th</sup> February, 2023.



- 19. Dr. Gaurav Sharma, Scientist-E and Officer-in-Charge, ZSI, NRC, Dehradun attended meeting with Government Advocate in the matter of Court Case at High Court Delhi on 18<sup>th</sup> and 25<sup>th</sup> February, 2023.
- 20. Dr. Narender Sharma, Scientist-E, ZSI, NRC, Dehradun attended "Brainstorming session on Science, Technology and Innovation Policy" for Uttarakhand organised by Uttarakhand State Council for Science and Technology on 10<sup>th</sup> February, 2023.
- Dr. P. Padmanaban, Assistant Zoologist and other supporting staff participated in 1st Environment and Climate Sustainability Working Group Meeting (G20) during 09<sup>th</sup> – 11<sup>th</sup> February 2023 at Bengaluru, Karnataka.
- 22. Surendar C, and Shri. R. Rajendar Kumar, Senior Zoological Assistants attended "Career Progression Mandatory Training 2023" from 24.01.2023 to 10.02.2023 conducted by Headquarters, Zoological Survey of India, Kolkata. This program included Sunderban Field trip from 01st-03rd February 2023 with submission of field report.

#### TRAININGS ORGANIZED

- Conducted the first Career Progression Mandatory Training (CPMT) for Senior Zoological Assistants at HQ,ZSI from 24<sup>th</sup> January 2023 -10<sup>th</sup> February 2023 in which 20 trainees from Headquarters and different Regional Centres of ZSI took part.
- ANRC organised one day training on Biodiversity of Andaman and Nicobar Islands to the School students of Government Senior Secondary School, Haddo on 13<sup>th</sup> February 2023.
- 3. One day training programme entitled "Marine Biodiversity and Conservation with special reference through DNA Bar-coding techniques" was conducted by MARC Digha, and the centre also conducted Mission LiFE awareness programme on "Conserve water & Save Energy" with 33 students from Department of Zoology, Rairangpur College, Rairangpur, Odisha on February 26, 2023.

#### TRAININGS ATTENDED

- Dr. S. Balakrishnan, Scientist E, participated and attended an one day workshop on "Role of Biodiversity in Sustainable Lifestyle" organized by EIACP Centre on Biodiversity (Fauna), Zoological Survey of India, Hqs, Kolkata in collaboration with Hemachandra Simanta Sanskrit Vidyalaya, Jaleswar, Odisha for the school students on 16<sup>th</sup> February 2023.
- Shri. Sreejith S. Kumar, Senior Zoological Assistant and Dr. Kamalakannan M. Senior Zoological Assistant have participated 'Carrier Progression Mandatory Training' for Senior Zoological Assistants which was held at the Headquarters, Zoological Survey of India, Kolkata from 24<sup>th</sup> January to 10<sup>th</sup> February 2023.
- 3. S.D. Gurumayum, Sci- E & L Seitinmang Khongsai, Sr. Zool. Asstt of APRC attendeda2 days Training of Trainers (ToT) Programme on Conservation Education: Himalayan Biodiversity, February 27<sup>th</sup>-28<sup>th</sup>, 2023 at GB Pant Institute of Himalayan Environment

#### LECTURES DELIVERED

- Dr. P.C. Pathania, Scientist-E of HARC, Solan delivered keynote-address in the Seminar sponsored by College Development Council, Panjab University, Chandigarh organized by the A.S. College, Samrala Road, Khanna, Punjab on 13<sup>th</sup> February, 2023.
- 2. Dr. Manpreet Singh, Scientist-D of HARC, Solan delivered an Invited talk in 'Regional Level Seminar on Present Status, Distribution and Ecology of Wildlife in Punjab' organized by A.S. College, Khanna on 13-02-2023, sponsored by College Development Council Panjab University, Chandigarh.
- 3. Dr. C. Sivaperuman, Scientist-E ANRC, delivered a talk on an overview of Biodiversity of A & N Islands at Department of Zoology, Government Arts & Science College, Kumbakonam on 1st February 2023, on an overview of Biodiversity of A & N Islands at Department of Zoology, Government Women



College, Kumbakonam on 1st February 2023, on an overview of Biodiversity of A & N Islands (Tamil) & Motivational Speech at Department of Tamil, Government Women College, Kumbakonam on 2<sup>nd</sup> February 2023, on An Overview of Antarctica: Antarctica Research Expedition Experience at Centre for Advance Studies in Marine Biology, Annamalai University on 3<sup>rd</sup> February 2023.

- Dr. P. Girish Kumar, Scientist-D, WGRC delivered a lecture on 'Insects' to the B.Sc. students of the Department of Zoology, Govt. Arts & Science College, Kozhikode on 07<sup>th</sup> February 2023.
- S.D. Gurumayum, Sci-E, APRC delivered a talk on Objectives of LiFE: Conservation of Water and Energy during the awareness campaign organized at Himalayan University, Jullong of Itanagar Capital-Complex on 15th February, 2023, on Biodiversity of Chakpi river at One-day Workshop cum Brainstorming session on "Conservation action for Chakpi river, Manipur on 20th February 2023 organised by GIZ's -Protection and Sustainable Management of Aquatic Resources in the North-Eastern Himalayan Region of India, on Fish diversity of Arunachal Pradesh, Fish Preservation and Fishing Technique on 27th February 2023 during the 2 days Training of Trainers (ToT) Programme on Conservation Education: Himalayan Biodiversity, February 27-28, 2023 at GB Pant Institute of Himalayan Environment, on Vertebrate Fauna of Arunachal Pradesh during National Science Day celebration on 28th February 2023 at Himalayan University, Arunachal Pradesh.
- Ilona J. Kharkongor, Sci-E, and Temjenmongla, Sci-D APRC delivered a talk on LiFE: Conservation of Water during the awareness campaign organized at Himalayan University, Jullong of Itanagar Capital-Complex on 15<sup>th</sup> February, 2023
- Dr. S. Balakrishnan, Scientist E, MARC Digha, delivered an online lecture as an invited speaker on "Coastal Marine Biodiversity" in Tamil, organized by Government Higher Secondary School, Thenkodipakkam, Tamil Nadu on February 27<sup>th</sup>, 2023; delivered an online lecture as an invited

- speaker on "Coastal Marine Biodiversity: Challenges, Threats and their Conservation" in DBT FIST sponsored International Conference on Contemporary Research for the Sustainable Development of Biological Sciences (ICCRSDBS 2023), organized by Vivekanadha Colege of Arts & Sciences for Women (Auto.), Tiruchengode, Tamil Nadu on February 2<sup>nd</sup>, 2023.
- 8. Ms. Supriya Nandy, Scientist D delivered lecture on 'Palaeozoology and History of Evolution' as part of Career Progression Mandatory Training(CPMT) of Senior Zoological Assistants of ZSI on 6<sup>th</sup> February, 2023.
- Ms. Debashree Dam, Scientist –B delivered a lecture on 'Stress management and practical tools to combat stress" to the trainees of Career Progression Mandatory Training (CPMT) for Senior Zoological Assistants at HQ,ZSI.
- 10. Dr. Souvik Sen, Scientist-D delivered one lecture on 'Arachnid Diversity' in the 'Career Progression Mandatory Training for Senior Zoological Assistant' at ZSI HQ Kolkata on 7<sup>th</sup> February, 2023.
- Dr Tamal Mondal Scientist D Delivered a talk on Coral Reefs during Carrier Progression Mandatory Training for Senior Zoological Assistants at Annadale Hall, ZSI, Kolkata on 9<sup>th</sup> February 2023.
- Dr. Shakur Ahmed, PDF delivered lecture on "Collection, Preservation and Identification of Annelida" at GPRC, ZSI, PATNA on 24<sup>th</sup> January, 2023.
- 13. Dr. A.S. Kalawate, Scientist-E delivered lecture on "Introduction to moths" to M.Sc. students of Fergusson College, Pune on 23<sup>rd</sup> January 2023.
- 14. Dr. S.S. Talmale, Scientist-C delivered lecture on "Conservation of Indian Mammals" as a resource person for Pre-Ph.D. Course work in research methodology for Ph. D. admitted students at K.J. Somaiya College of Arts, Commerce & Science, Kopargaon, Maharashtra on 1st February 2023.



- Dr. K.A. Subramanian, Scientist-E & Officer-in-Charge delivered lectures on Biodiversity and Conservation of Freshwater Macroinvertebrates. MES, Mampad, Kerala. 8th February, 2023.
- Biodiversity and Conservation of Freshwater Macroinvertebrates. Nirmala College, Coimbatore. 17<sup>th</sup> February, 2023.
- 17. Gaurav Sharma, Scientist-E and Officer-in-Charge, ZSI, NRC, Dehradun delivered invited lecture on topic entitled "Importance and role played by Wetlands in the Conservation of Fauna in India" to B.Sc. and M.Sc. students in the conference hall of Dolphin PG Institute of Bio-Medical and Natural Sciences, Dehradun on o2nd February, 2023.
- 18. Dr. Gaurav Sharma, Scientist-E and Officer-in-Charge, ZSI, NRC, Dehradun delivered lecture on topic entitled "Faunal Diversity and their conservation in India" to M.Sc. Zoology and Botany students of Hazarimal Somani College, Mumbai, Maharashtra in the conference hall of ZSI, NRC, Dehradun on O2nd February, 2023.
- 19. Dr. Gaurav Sharma, Scientist-E and Officer-in-Charge, ZSI, NRC, Dehradun delivered lecture on topic entitled "Status of Faunal Diversity and their Conservation in India" to M.Sc. Zoology students of Shri Sumer Mahila Mahavidyalaya, Jodhpur, Rajasthan in the conference hall of ZSI, NRC, Dehradun on 05th February, 2023.
- 20. Dr. Gaurav Sharma, Scientist-E and Officer-in-Charge, ZSI, NRC, Dehradun delivered invited lecture on topic entitled "Animal Taxonomy" to M.Sc. students in the conference hall of Dolphin PG Institute of Bio-Medical and Natural Sciences, Dehradun on 07th February, 2023.

- 21. Dr. K.K. Bineesh, Scientist-E, attended the Annual Research Conference, held on 16-17 February 2023 at Advanced Institute for Wildlife Conservation, Vandalur, Chennai and he given presentation on "Threatened Species of Batoids in the Tamil Nadu".
- 22. Shri. R. Rajendar Kumar participated attended the Annual Research Conference, held on 16<sup>th</sup>– 17<sup>th</sup> February 2023 at Advanced Institute for Wildlife Conservation, Vandalur, Chennai and he given oral paper presentation on "Taxonomy and distribution of Micro-Mollusc of Gulf of Mannar Biosphere Reserve."
- 23. Dr N Marimuthu has given lecture on "Biological Indicators of Marine Habitat" in the Two day National Level Conference on Scientific Input, Technological Advancement and Women Empowerment for Sustainable Development (Sponsored by Indian Science Congress Association, Kolkata) between 2<sup>nd</sup> and 3<sup>rd</sup> February 2023 at PG and Research Department of Zoology, Kongunadu Arts and Science College, Coimbatore



### Gallery



Release of book, Fauna of Puducherry













During Ph.D enrolment certificate distribution