



# ZSI enews



सत्यमेव जयते



Ministry of Environment,  
Forest and Climate Change



Zoological Survey  
of India, 1916



आज़ादी का  
अमृत महोत्सव

## From the Director's Desk



Indeed, it is a matter of pride that, proposals of ZSI for inclusion of three reptilian species in different appendices of the CITES has been accepted during the CITES CoP 19 held at Panama City. This provides global attention of protecting these species from illegal trade. The month also witnessed the description of 18 new species under molluscs, crustaceans and insects while identifying 13104 specimens comprising 2537 species. ZSI imparted training programme on Taxidermy in its headquarters at Kolkata and training on Ornithology at Andaman and Nicobar Regional Centre at Port Blair in which more than 100 researchers benefited. The outcome of ZSI studies has been published as 2 books, 12 papers in peer reviewed journals and 20 book chapters. Altogether 47 DNA barcodes have been generated for 26 species and uploaded in GenBank, The National Zoological Collections have been enhanced with the augmentation of 57 species during the month. Surveys conducted in Western Ghats, Andaman and Nicobar Islands, Uttarakhand, Manipur, Andhra Pradesh and Odisha coast to assess the faunal component. All the Officers and staffs of ZSI, HQ and RCs read the Preamble to the Constitution on 26th November 2022.

I appreciate all the officers and staff of ZSI for their significant contribution during the month.

Jai Hind

Dr. DHRITI BANERJEE  
Director  
5<sup>th</sup> December 2022  
Kolkata

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Cover photo: *Macaca mulatta* (Zimmermann, 1780); Courtesy: FBRC, Hyderabad.



## HEADQUARTERS, KOLKATA



Training workshop on Skill & Techniques of Taxidermy organized by ZSI Headquarters

Dr. Dhriti Banerjee, Director, ZSI participated in the 19<sup>th</sup> meeting of the Conference of the Parties (CoP19) held in Panama City, on Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), from 14<sup>th</sup> to 25<sup>th</sup> November 2022, and also attended 75<sup>th</sup> and 76<sup>th</sup> meetings of the Standing Committee at the same venue on 13<sup>th</sup> and 25<sup>th</sup> November 2022. ZSI proposed for inclusion of Jeypore Hill gecko, *Cyrtodactylus jeyporensis* (Beddome, 1877) in Appendix-II, and transfer two species of turtles, Red-crowned roofed turtle, *Batagur kachuga* (Gray, 1831) and Leithi's softshell turtles, *Nilssonina leithii* (Gray, 1872) from Appendix-II to Appendix-I was accepted in the Conference of the Parties (CoP 19). Half Yearly Progress monitoring meeting for ZSI Regional

Centres held at NERC, Shillong on 2<sup>nd</sup> to 4<sup>th</sup> November 2022 and for Headquarters held on 7<sup>th</sup> November 2022 at Kolkata. In addition 16<sup>th</sup> Meeting of RAMC has also been conducted at Shillong on 2<sup>nd</sup> and 3<sup>rd</sup> November 2022. Altogether 5526 specimens comprising 1300 species have been identified, of which 48 species were newly augmented to National Zoological Collections. Inputs on mangroves with reference to carbon sequestration, coastal

protection and livelihood; a brief note on Management of Marine Ecosystem and Mangroves; write-up of ZSI for Reference Manual – INDIA 2023 have been submitted to the Ministry. In addition, inputs of ZSI for the Hon'ble President of India's address in both Houses of Parliament for the first session of 2023; inputs for Agenda Items 21 (Invasive Alien Species) and 22 (Sustainable Wildlife Management) for CBD CoP 15; article on *Holistic development of*

*Great Nicobar Island- an environmental friendly initiative* were submitted to the MoEFCC. Comments of ZSI on the proposal of import of trout eyed ova eggs from Denmark by Department of Fisheries, Government of J & K has been submitted to Ministry of Agriculture and Farmers Welfare, Government of India. Besides 10 cases of confiscated wildlife material have been identified and report submitted to the offices concerned.

Director, ZSI attending the CITES CoP 19 at Panama City





## NORTH EASTERN REGIONAL CENTRE, SHILLONG, MEGHALAYA

Releasing of  
Annual Report  
of ZSI 2021-22

Students' visit  
from Nagaland  
University



The centre successfully held the 16<sup>th</sup> RAMC and Half yearly meeting of ZSI from 2-4<sup>th</sup> November. A survey to Manipur was undertaken during 17<sup>th</sup> - 24<sup>th</sup> November 2022 under the protection and sustainable management of aquatic resources in the north eastern Himalayan region of India (NERAQ Project) funded by GIZ. Identified 57 species: Cladocera-6 spp., Amphibia- 6 spp., Pisces-26 spp., Crustacea- 2 spp., Reptilia-1 sp., Aves-1 sp. and aquatic Hemiptera-15 spp. Two identification and advisory services provided to the DFO, Wildlife, East Khasi Hills and to Sh. Addi Gude, Photographer and conservationist, Aurangabad.



## WESTERN REGIONAL CENTRE, PUNE, MAHARASHTRA

Scientists of the centre identified 58 species of Crustacea, Amphibia, Mammalia, Lepidoptera and Coleoptera. Two surveys conducted to Gandikota, YSR (Kadapa) district, Andhra Pradesh from 14<sup>th</sup> to 19<sup>th</sup> November and to Jogimatti Wildlife Sanctuary, Chitradurga district, Karnataka from 24<sup>th</sup> to 30<sup>th</sup> November. Identification and advisory services provided to Kolhapur college, on Amphibia and to University of Calicut, Kerala. Two confiscated materials identified and submitted to Rabale MIDC, Police Thane, New Mumbai, for pangolin scales (2 nos.) and to Mahatma Gandhi Chowk Police Thane, Miraj for leopard skin, antlers and pangolin scales. 10 sequences (mt 16S rRNA) of reptilian samples from the Western Ghats have been submitted.



Common pierrot, *Castalius rosimon* (Fabricius, 1775)

Gandikota Canyon,  
Andhra Pradesh





## CENTRAL ZONE REGIONAL CENTRE, JABALPUR, MADHYA PRADESH

Eight days survey conducted to Panna Bioshpere Reserve from 04.11.2022 to 11.11.2022. Scientists of the Centre identified and registered 71 species containing Orthoptera: 10 species; Lepidoptera: 35 species; Hemiptera: 07 species; Scorpion: 02 species; Mollusca: 10 species; Amphibia: 07 species. One Ph. D. thesis from Shivaji University, Kolhapur on Coleoptera evaluated in the Centre. Observed National Unity Day on 31<sup>st</sup> October 2022; Vigilance awareness week from 31<sup>st</sup> October to 06<sup>th</sup> November, 2022 and Constitution Day on 26<sup>th</sup> November 2022



Neelgai Blue bull, *Boselaphus tragocamelus* Pallas, 1766



Ken river passing through Panna Bisophere Reserve

## DESERT REGIONAL CENTRE, JODHPUR, RAJASTHAN

Survey has been conducted to Mount Abu Wildlife Sanctuary during 15<sup>th</sup> to 25<sup>th</sup> November 2022 and identified 48 species. The officers and staff of the Centre observed Vigilance Awareness Week and read the Preamble on the Constitution Day.



Observance of the Vigilance Awareness Week 31<sup>st</sup> October to 6<sup>th</sup> November 2022



Constitution Day, pledge on 26<sup>th</sup> November 2022

## NORTHERN REGIONAL CENTRE, DEHRADUN, UTTARAKHAND



*Machlolophus xanthogenys*  
(Vigors, 1831)

Celebration  
of Vigilance  
Awareness Week



Scientists of the Centre identified 60 species belonging to eight faunal groups i.e., Protozoa, Phthiraptera, Odonata, Lepidoptera, Orthoptera, Pisces, Amphibia and Reptilia. One faunistic survey was undertaken from 5<sup>th</sup> to 17<sup>th</sup> November 2022 to three conservation reserves (Rakh Sarai Amanat Khan, Rajit Sagar and Beas river) of Punjab; Faunal Diversity of Abohar Wildlife Sanctuary, Punjab; Faunal diversity of Khol Hi Raitan (Morni Hills) Wildlife Sanctuary, Haryana. Vigilance Awareness week was celebrated w.e.f. 31<sup>st</sup> October to 6<sup>th</sup> November, 2022. Integrity Pledge was undertaken on 31<sup>st</sup> October 2022, The Centre organized and celebrated Constitution Day on 26<sup>th</sup> November 2022. Pamphlets with Corruption free India were distributed on 3<sup>rd</sup> November 2022.



## SOUTHERN REGIONAL CENTRE, CHENNAI, TAMIL NADU

Six species and three new genera of Ephemeroptera were discovered in a review of the genus *Kimminsula* complex from India and Sri Lanka in collaboration with St-Petersburg State University, Russia. A field survey was undertaken in Madhya Pradesh, and scat samples of Rhesus macaques were collected in connection with studies on the phylogeography and colonisation history of Indian Rhesus macaques (*Macaca mulatta*). A total of 65 species from Ephemeroptera, Odonata, Lepidoptera, Plecoptera, Psocoptera, Mollusca, Rotifera, Cladocera, Rhizopoda, Ostracoda, Amphibia and Reptiles were identified during the month. Dr. Supun Deshaprema, Secondary Secretary, Sri Lanka Deputy High Commission, Chennai, visited the Centre and briefed the Zoological Survey of India on its activities. Identification and advisory service rendered on two species of Mollusca to Loyola College, Chennai. The scientists reviewed manuscripts for three SCI journals.



| *Indotestudo travancorica* (Boulenger, 1907)



| Visit by Sri Lankan High Commission Second Secretary

## GANGETIC PLAINS REGIONAL CENTRE, PATNA, BIHAR

Thirty four species identified. Constitution Day was observed on 26.11.2022. Evaluated Ph.D. thesis received from University of Gour Banga, Malda, West Bengal.



| *Parreysia Radiatula caerulea* (Lea, 1831)

| Storkbill King Fisher *Pelargopsis capensis* Linnaeus 1766.



## HIGH ALTITUDE REGIONAL CENTRE, SOLAN, HIMACHAL PRADESH

Vigilance  
awareness week  
observation



Indian Grey Hornbill *Ocyrceros birostris*



Conducted an extensive survey in the Agro-ecosystems of district Sirmour (HP) from November 19-25, 2022. Identified 22 species of Lepidoptera, 12 species of Trichoptera 06 species of Pisces for the month. 22 species of Lepidoptera, 12 species of Trichoptera and 06 species of Pisces were augmented to the collections of the Centre. Identification and Advisory Service provided to Punjab Agricultural University, Govt. PG College, Sarkaghat, Mandi, HP on Lepidoptera; to Lovely Professional University, Phagwara (Punjab) and Himachal Pradesh University, Shimla on Orthoptera. Two research papers reviewed for *International Journal of Tropical Insect Science* and *UP Journal of Zoology*. Centre organized vigilance awareness week-2022

## MARINE BIOLOGY REGIONAL CENTRE, CHENNAI, TAMIL NADU

Long term survey conducted to Lakshadweep and field visits made to Narara reef, Laku point reef, Mithapur reef and Arahambada reef, Gujarat to assess the coral health as a part of coral restoration. Identified 65 species, including Marine Sponges 07 species; Scleractinian Corals 01 species; Marine Nematodes 05 species; Bryozoa 05 species; Foraminifera 05 species; Mollusca 20 species; Echinoderms 04 species and Fishes 18 species.



*Hexanchus griseus*  
(Bonnaterre, 1788)

Water quality  
parameters  
analysis through  
hydrolab



## ANDAMAN AND NICOBAR REGIONAL CENTRE, PORT BLAIR



Nicobar Black-naped Monarch-Flycatcher  
*Hypothymis azurea idiochroa* Oberholser 1911

One long term survey have been conducted to North & Middle Andaman during 9<sup>th</sup> to 18<sup>th</sup> November and local field surveys were conducted to different areas of South Andaman. A total of 172 species were identified comprised of Freshwater Fishes 22 species; Mollusca 17 species; Echinoderms 13 species from the marine environment; Arachnida 30 species; Lepidoptera 42 species; Birds 48 species were identified from the terrestrial environment. Identified 3 species of fishes, and 5 species of Echinoderms to the Department of Environment & Forests, Andaman & Nicobar Islands.



*Linckia guildingi*  
Gray 1840.

## SUNDERBAN REGIONAL CENTRE, CANNING, WEST BENGAL

Survey conducted for 12 days along Barak River, Assam on 7<sup>th</sup> to 18<sup>th</sup> November 2022. Two day local survey undertaken in Kakdwip, Namkhana, Diamond Harbour on 19<sup>th</sup> & 20<sup>th</sup> November 2022. Total 102 spp. were identified including 35 spp. of fish, 65 spp. of mollusca, 1 sp. of crustacea and 1 sp. of Arachnida.



Reading of preambles in Constituion Day

*Anhinga melanogaster*  
(Pennant, 1769)



## FRESHWATER BIOLOGY REGIONAL CENTRE, HYDERABAD, TELANGANA

Identified 15 species of Aquatic Coleoptera, 15 species of Aquatic Hemiptera, 3 species of Ostracoda, 9 species of Branchiopoda, 23 species of Mollusca, 2 species of Mammalia, and 27 species of fishes during the month of November. 10 sequences have been submitted to NCBI. Constitutional day celebrated by reading the preamble on 26<sup>th</sup> November 2022.

*Funambulus palmarum*  
(Linnaeus, 1766)





## WESTERN GHAT REGIONAL CENTRE, KOZHIKODE, KERALA

The monograph on the wasp genus *Tiphia* (Hymenoptera: Tiphidae) with ten new species and seven new records to India was published. Faunistic survey of Parambikulam Tiger Reserve, Palakkad, Kerala is conducted from 26 October to 04 November, 2022. Ninety two species containing different groups, viz. Protozoa, Crustacea, Arachnida, Coleoptera, Hymenoptera, Dermaptera and Mantodea were identified. Identification services provided to WII, Dehradun for Hymenoptera and Crustacea. Research paper reviewed for *International Journal of Tropical Insect Science*. Two confiscated materials received from the Ramanathapuram Forest Division, Tamil Nadu were processed and the identification report has been sent to the concerned authority.



Parambikulam Survey team at Kannimara Teak

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

One day local Survey to Bahuda estuary has been conducted. During this month 106 species were identified. Eight DNA barcodes were uploaded in the NCBI data base. On 17<sup>th</sup> October 2022, International Sawfish Day was celebrated.



Sambidhan diwas at EBRC

## ARUNACHAL PRADESH REGIONAL CENTRE, ITANAGAR



*Stenocatantops splendens*  
Thunberg 1815

A total of 81 species: Lepidoptera 48 spp.; Orthoptera 13 spp.; Gastropoda 07 spp.; Coleoptera 01sp.; Diplopoda 02 spp.; Pisces 5 spp.; Amphibia 04 spp & Reptilia 01 sp. were identified & registered by the scientists of the Centre.



*Cirrochroa tyche*  
Felder 1861



## MARINE AQUARIUM AND REGIONAL CENTRE, DIGHA, WEST BENGAL

A new species of cephalaspidean sea slug of the genus *Melanochlamys* Cheeseman, 1881 (Heterobranchia: Aglajidae) from the Bay of Bengal, India was described. Surveys conducted to Maharashtra and Gujarat coast from 01<sup>st</sup> – 12<sup>th</sup> November 2022. Nine days local survey conducted to Digha. Scientists of the Centre identified 100 species belonging to Mollusca (78 spp.), Polychaete (05 spp.) and Fishes (17 spp.). Constitution Day 2022 was celebrated on 26<sup>th</sup> November 2022. Evaluated one Ph.D. thesis for Presidency College, Madras and reviewed three manuscripts for the journals, *Biomass Conversion and Biorefinery*, *Environmental Science and Pollution Research* and *Thalassas: An International Journal of Marine Sciences*.



*Gymnura poecilura* (Shaw, 1804)



Training programme for "Intertidal fauna collection, preservation and identification at Digha Mohana beach"



# NEW DISCOVERIES AND NEW RECORDS

## NEW SPECIES



*Gurumon gurumayum* Pati, 2022



*Melanochlamys bengalensis* Tudu, Sajan & Mukhapadhyay, 2022



*Kimminsula latifolia* Kluge, Vasanth, Sivaramakrishnan & Balasubramaian, 2022



*Petersula heptagenoides* kluge, Vasanth, Sivaramakrishnan & Balasubramaian, 2022



*Hubbardula heterotepida* kluge, Vasanth, Sivaramakrishnan & Balasubramaian, 2022



*Kimminsula podi* kluge, Vasanth, Sivaramakrishnan & Balasubramaian, 2022





| *Ghatula rufa*, Kluge, Vasanth, Sivaramakrishnan & Balasubramaian, 2022



| *Ghatula quadrimaculata*, Kluge, Vasanth, Sivaramakrishnan & Balasubramaian, 2022



| *Tiphia bijui*



| *Tiphia chareshi*



| *Tiphia davidrajui*



| *Tiphia hyalina*



| *Tiphia kurumba*



| *Tiphia novus*





*Tiphia rajeevani*



*Tiphia sahyadriensis*



*Tiphia shajii*



*Tiphia venkataramani*

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1. Palot, M.J. 2022. Reptilian diversity of Kerala- An Overview. *Papilio*, a newsletter of Department of Zoology, SS College, Thaliparamba, 5(1): 37-40

## MEETINGS ATTENDED

1. Dr. Dhriti Banerjee, Director, ZSI attended 16<sup>th</sup> Research Advisory and Monitoring Committee (RAMC) and Half-Yearly Meeting of Senior Officers of Regional Centre of Zoological Survey of India 2<sup>nd</sup> to 4<sup>th</sup> November, 2022 at North Eastern Regional Centre, Shillong and on 7<sup>th</sup> November 2022 at ZSI HQ, Kolkata to discuss the progress made during the period from 1<sup>st</sup> April, 2022 to 30<sup>th</sup> September, 2022; attended the 1<sup>st</sup> Group Monitoring Workshop of PAC Organismal and Evolutionary Biology – Animal Sciences during 28-29 November, 2022 at Jawaharlal Nehru University, New Delhi; reviewed 34 ongoing projects sanctioned during early 2020; chaired the Monthly Scientific Consultation Committee meeting of ZSI Headquarter & Regional Centres on 30<sup>th</sup> November, 2022.
2. Dr. C. Raghunathan, Scientist F, served as a Member Secretary in Scientific Committee of Half Yearly Progress monitoring committee meeting of ZSI Regional Centres held on 2<sup>nd</sup> to 4<sup>th</sup> November at NERC, Shillong and 7<sup>th</sup> November at ZSI Headquarters; served as a Member Secretary in 16<sup>th</sup> meeting of RAMC held on 2<sup>nd</sup> November 2022 at NERC, Shillong; provided inputs on mangroves with reference to carbon sequestration, coastal protection and livelihood submitted to the Ministry on 7<sup>th</sup> November 2022; a brief note on Management of Marine Ecosystem and Mangroves has been submitted to the Ministry on 10<sup>th</sup> November 2022, and brief write-up about ZSI for Reference Manual – INDIA 2023 has been submitted to the Ministry; attended the meeting on Government Land Information System-Registration and updation of Land and Building Parcels organized by MoEFCC on 14<sup>th</sup> November 2022 through VC mode; chaired the meeting with scientists of ZSI (vertebrate group) for addressing the issues to preparation of EPI: Biodiversity and Habitat related indicator as required by Ministry of Statistics and Programme Implementation on 14<sup>th</sup> November 2022; attended the meeting under the chairmanship of Secretary, Department of Administrative Reforms & Public Grievances (DARPG) on 14.11.2022 with Central



Ministries and Departments on Prime Minister's Awards for Excellence in Public Administration 2022; attended the meeting at Forest Department, Arunachal Pradesh, Itanagar on 18<sup>th</sup> November 2022 for the submission of management plan for Dihang-Dibang Biosphere Reserve, Arunachal Pradesh; inputs of ZSI for the Hon'ble President of India's address in both Houses of Parliament for the first session of 2023 submitted to MoEFCC on 21<sup>st</sup> November 2022; attended the Meeting regarding Implementation of a five year period for Integrated Management Action Plan for Biosphere Reserves as pilot project held at MoEFCC on 24<sup>th</sup> November 2022; provided inputs for Agenda Items 21 (Invasive Alien Species) and 22 (Sustainable Wildlife Management) for CBD CoP document as required by MoEFCC on 25<sup>th</sup> November 2022; furnished replies to four different RTI questions related to Holistic Development of Great Nicobar Island and import of corals and aquarium keeping; prepared an article on Holistic development of Great Nicobar Island-an environmental friendly initiative and submitted to the Additional Secretary, MoEFCC on 25<sup>th</sup> November 2022; comments of ZSI on the proposal of import of trout eyed ova eggs from Denmark by Department of Fisheries, Government of J & K has been submitted to Ministry of Agriculture and Farmers Welfare on 29<sup>th</sup> November 2022.

2. Dr. Kamal Saini, Asstt Zoologist attended the North Zone Rajbhasha Conference, 2022 at Guru Nank Dev University, Amritsar (Punjab) organized by the Government of India, Home Ministry, Raj Bhasha Vibagh on 03-11-2022.
3. Dr B. Sinha, Sci- E & Sh B. Saikia, SZA attended the stakeholders workshop of NERAO project on faunal inventorisation of Pilot areas in Manipur organized by GIZ at Imphal on 19<sup>th</sup> November 2022.
4. Dr. K. A. Subramanian, Scientist-E attended the State Wildlife Board Meeting at Tamil Nadu Secretariate, Chennai on 16.11.2022; attended the Ph.D. Viva-Voce, Madras Christian College (University of Madras), Chennai on 22.11.2022; conducted Ph.D. Viva-Voce (online mode) as an External examiner of Christ College, Iringalakkuda, Kerala (Calicut University) on 23.11.2022.
5. Dr. C. Sivaperuman, Scientist-E attended Foundation Day celebration of Indira Gandhi National Open University (IGNOU) on 19<sup>th</sup> November 2022 as Chief Guest; attended as Guest of Honour, the celebration of World Fisheries Day 2022 & workshop cum awareness programme "Marine fishery resources of A & N Islands, sustainable development management and conservation on 21<sup>st</sup> November 2022; attended as Chief Guest, the Constitution Day celebration, organized by Andaman Law College 26<sup>th</sup>

November 2022.

6. Dr. A.S. Kalawate, Dr. K.P. Dinesh and Dr. D. Vasanthakumar, Senior Zoological Assistant attended a meeting with the scientist of National Institute of Virology, Pune on 17<sup>th</sup> November 2022 to explore the possibilities of the collaboration of research between the two organizations.
7. Dr. Gaurav Sharma, Scientist-E participated in the MEE studies of 03 Wildlife Sanctuaries of Arunachal Pradesh as among 04 Team Member of MEE TEAM 16 from 13 to 23 November, 2022.
8. Dr. Anil Kumar, Scientist-E participated from 28 Oct to 1 Nov., in MEE tour to Valley of Flowers NP, Uttarakhand.
9. Dr. Gaurav Sharma, Scientist-E Dr. Aftab Ahmad, Scientist-D and staff participated as Exhibitor in the "3<sup>rd</sup> Dehradun International Science & Technology Festival" organized by Uttarakhand State Council for Science & Technology, Dehradun in their campus from 25 to 27 November, 2022 and received the Best Exhibition Stall Certificate from the DG, UCOST, Dehradun on 27<sup>th</sup> November, 2022.

## TRAININGS ORGANIZED

1. ZSI Headquarters, Kolkata Organized Training Workshop on "Skill and Techniques of Taxidermy" from 15- 17<sup>th</sup> November, 2022.
2. ANRC, Port Blair organized five day training on Bird Identification and Basic Ornithology to the frontline staff of the Department of Environment and Forests, A & N Islands, sponsored by Department of Environment and Forests during 7<sup>th</sup> – 11<sup>th</sup> November 2022; Organised two week workshop on Bird Identification and Basic Ornithology under the Accelerate Vigyan Scheme (AV), sponsored by Science and Engineering Research Board (SERB), Department of Science and Technology, Ministry of Science and Technology, Government of India during 15<sup>th</sup> – 29<sup>th</sup> November 2022.
3. NERC, Shillong imparted hands-on training on various aspects of animal taxonomy to the visiting students of Nagaland University between 16-18<sup>th</sup> November; A one day orientation training was organized for 18 Project Associates of Meghalaya Biodiversity Board on the 10<sup>th</sup> November



## TRAININGS ATTENDED

1. Dr. P.C. Pathania, Scientist-E, Dr. Narender Sharma, Scientist-E & Dr Manpreet Singh Pandher, Scientist-D attended one day training programme under SERB-DST on 'Identification and management of mites on fruits and vegetable crops' on 22/11/2022 organized by Department of Entomology, PAU, Ludhiana.
2. Dr. Ranjana, Scientist-E, participated in 7 days of STUTI training program organised by the Department of Biotechnology, Panjab University, Chandigarh, in association with Sophisticated Analytical Instrumentation facility (SAIF), Panjab University from 14<sup>th</sup> to 20<sup>th</sup> November, 2022.
3. Dr. Souvik Sen, Scientist-D attended DST sponsored training programme on "Science, Technology and Emerging Trends in Governance" from 21<sup>st</sup> November 2022 to 25<sup>th</sup> November 2022 at Indian Institute of Public Administration, New Delhi.
5. Dr. Anil Kumar, Scientist-E participated and delivered talk titled 'Variations in the spectro-temporal song characteristics in four sub-species of Indian Robin, *Copsychus saularis*' under the theme "Avian Acoustics" on 10<sup>th</sup> Nov. 2022 in the 'National Symposium on Avian Biology'; delivered invited talk titled "Avifauna of Himalayas with special reference to Song & Calls" in the workshop on "Bird Identification and Basic Ornithology" under the Accelerate Vigyan (AV) sponsored by the Science & Engineering Research Board (SERB), Department of Science & Technology, Government of India, from 15<sup>th</sup> November 2022 to 28<sup>th</sup> November 2022, organized by Zoological Survey of India, Andaman and Nicobar Regional Centre, Port Blair.
6. Dr. K. A. Subramanian, Scientist-E & Officer-in-Charge, delivered lecture on Faculty Improvement Training Programme to the Department of Zoology, University of Madras.
7. Dr. S.K. Pati, Asst. Zool. delivered a lecture on "Animal Taxonomy" for the graduate and postgraduate students of the New Arts, Commerce and Science College, Ahmednagar on 22<sup>nd</sup> November 2022.
8. Dr. M.J. Palot, Sci-B delivered an online lecture on "Butterfly diversity of Western Ghats- An overview" in connection with the inauguration of the Zoology Association of Deva Matha College, Kuravilangad, Kottayam, Kerala on 24<sup>th</sup> November 2022.
9. Dr. K.P. Dinesh, Sci-E delivered a short talk on 'Need for biodiversity assessment' to the Masters student of Indapur College, Pune Maharashtra at ZSI, WRC, Pune on 14<sup>th</sup> November 2022.

## LECTURES DELIVERED

1. Dr. D. S. Suman, Scientist – E has delivered an invited special lecture on "Mosquito vectors, transmitted diseases and the role of biotechnology and microbiology in their management" to the M. Sc. Students and research scholars of Microbiology, Biotechnology and Pharmacy departments of Kota University, Kota Rajasthan on 20.10.2022.
2. Dr Gopal Sharma, Scientist E delivered a lecture on River Ganga and the conservation of its fauna at R N College Hajipur, Bihar organised by the Vaishali District NYK Bihar on 25.11.2022.
3. Dr. C. Venkatraman, Scientist-E, delivered a lecture on 'Wetland Birds of India and its Importance' in five-day training course on 'Bird Identification and Basic Ornithology' and also on 'Taxonomic identification of Birds' and 'Wetland Birds of India and its Importance' for the frontline staff of the department of Environment and Forests, A & N Islands during 7<sup>th</sup> - 11<sup>th</sup> November 2022 organized by ANRC, ZSI, Port Blair.
4. Dr. Gaurav Sharma, Scientist-E delivered lecture on topic entitled "Status and Conservation of Faunal Diversity in India" in "3<sup>rd</sup> Dehradun International Science & Technology Festival" organized by Uttarakhand State Council for Science & Technology, Dehradun in their campus on 25 November, 2022.



# STORYLINE

## Three Reptiles from India under CITES

During the 19<sup>th</sup> meeting of the Conference of the Parties (CoP 19) of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) held on 14<sup>th</sup> -25<sup>th</sup> November 2022, Zoological Survey of India proposed three species of reptiles and developed proposals to include Jeypore Hill gecko in Appendix-II and transfer two species of turtles: Red-crowned roofed turtle and Leithi's softshell turtles from Appendix-II to Appendix-I.

Based on the surveys conducted by the Zoological Survey of India and other institutions and organizations working on these species, ZSI felt a strong need to include these species in the CITES list, and all these proposals got wider support and were adopted in the meeting.

**Jeypore hill gecko** *Cyrtodactylus jeyporensis* (Beddome, 1878) is an 'Endangered' species of small and handsome-looking gecko, endemic to the Eastern Ghats of India and is in the international pet trade, which is a serious matter of concern. As this species is not legally protected in the Wild Life (Protection) Act, 1972 and is not distributed in any Protected Areas, there are no official trading reports of this species in India. However, based on surveys in social media, this species was found with many pet owners and reptile breeders outside India. The proposal for this species to be included in Appendix II of CITES got adopted during the COP-19 meeting and in the Amendment of Wild Life (Protection) Act, 1972 this species has been proposed to be included in Schedule-I. As a follow-up of the conservation effort, ZSI has also proposed Araku Valley, Andhra Pradesh as a potential Key Biodiversity Area (KBA) for this species, which are sites designated by the International Union for Conservation of Nature (IUCN) for the conservation of threatened reptiles.



*Cyrtodactylus jeyporensis*  
(Beddome, 1878)



*Batagur kachuga* (Gray, 1831)

**The Red-crowned roofed turtle** *Batagur kachuga* (Gray, 1831) is a large, shy, riverine turtle which was known only to inhabit the Ganga basin of India and Bangladesh. It is now only known with certainty to exist in the National Chambal Sanctuary of India and is considered to be extinct in Bangladesh. It has selective habitat requirements and slow recruitment (generation time estimated over 25 years). The species is threatened by illegal exploitation for consumption and the international pet trade, particularly in East and South-East Asia. The males of the species are particularly targeted for the pet trade due to their brilliant colouration. The species is also threatened by systemic impacts on its main river habitat such as pollution, hydrological projects, and entanglement in fishing nets. *Batagur kachuga* has suffered steep declines in its population. The population is inferred to have reduced by at least 80% in the past 50 years, and this decline is ongoing. A 2019 study by TRAFFIC based on reported seizures for India calculated that between 2009 and 2019 on average more than 11,000 tortoises and freshwater turtles were poached and illegally traded every year and that species identification was not reported in 51.5% of the cases. *Batagur kachuga* qualifies for listing on CITES Appendix I since it is or may be affected by trade, and meets the biological criteria found in Resolution Conf, 9.24 (Rev. CoP17), Annex I, specifically paragraph C(ii). Due to the ongoing decline in the species' population and continued threats to the species, both of which are expected to continue in the future, any trade in the species will have a detrimental impact on its status. A CITES Appendix I listing would ensure that: (a) legal international trade in the species does not take place for commercial purposes; (b) international trade in captive-bred specimens only takes place from registered facilities, and (c) higher and more proportionate penalties are provided for illegal trade of the species.



**Leith's softshell turtle *Nilssonia leithii* (Gray, 1872)** is a large freshwater soft-shelled turtle that is endemic to peninsular India and inhabits rivers and reservoirs. *Nilssonia leithii* has been subject to intensive exploitation over the past 30 years. It has been poached and illegally consumed within India, but it is also illegally traded abroad for meat and its calipee. The species' habitat is in decline due to sand mining, pollution and hydrological alteration of rivers, resulting in the shrinkage of its geographic range. The population of *Nilssonia leithii* is estimated to have declined by 90% over the past 30 years such that the species is now difficult to find. A 2019 study by TRAFFIC based on reported seizures for India calculated that between 2009 and 2019 on average more than 11,000 tortoises and freshwater turtles were poached and illegally traded every year and that species identification was not reported in 51.5% of the cases. *Nilssonia leithii* qualifies for listing on CITES Appendix I since it is or may be affected by trade, and meets the biological criteria found in Resolution Conf, 9.24 (Rev. CoP17), Annex I, specifically categories A(i) and (v), B(i) and B(iv), and C(i). Given the decline in population and habitat of the species, any actual or potential trade in the species will have a detrimental impact on its status. A CITES Appendix I listing would ensure that: (a) legal international trade in the species does not take place for commercial purposes; (b) international trade in captive-bred specimens only takes place from registered facilities; and (c) higher and more proportionate penalties are provided for illegal trade of the species.



*Nilssonia leithii* (Gray, 1872)

Dr Pratyush Mohapatra  
Scientist-E





## CITES meeting at Panama



Indian Delegation  
to CITES CoP 19  
held at Panama  
City

