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सत्यमेव जयते



Ministry of Environment,
Forest and Climate Change



Zoological Survey
of India, 1916



आज़ादी का
अमृत महोत्सव

From the Director's Desk



It gives me an immense pleasure to present the November 2021 issue of E-News to readers. The month is witnessed with 12 long-term surveys in Manipur, Maharashtra, Tamil Nadu, Andaman and Nicobar Islands, Andhra Pradesh, Odisha, Kerala, Arunachal Pradesh, West Bengal and Bihar. Organisms under different faunal groups have been identified to the tune of 1274 species from 12020 specimens. Eight species of insects have been described as new to science while another four species turned out to be the new records to Indian fauna. As a measure of strengthening species in National Zoological Collections 120

species have been augmented during the month. Generation of 138 DNA barcodes made for 50 species under different faunal group is a significant progress on digital sequencing information. Fifteen identification and advisory services have been rendered in which various institutions got benefited. Altogether 30 publications have been made during the month, of which most them published in SCI/NAAS rated journals. All the officers and staff of ZSI read a Preamble on the Constitution of Day i.e. 26th November 2021. The students of the first batch of ten months long post graduate diploma course on integrated taxonomy has completed successfully which is first of its kind initiative in ZSI. I extend my gratitude to all the officers and staff of ZSI for making significant progress in November 2021 in terms of scientific contribution.

Jai Hind

Dr. DHRITI BANERJEE
Director
December 2, 2021
Kolkata

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Cover photo: *Porpita*
porpita (Linnaeus, 1758)

HEADQUARTERS, KOLKATA

Faunistic surveys were undertaken to Valmiki Tiger Reserve in Bihar from 11th to 28th November 2021, Siang river in Arunachal Pradesh from 16th to 28th November 2021, Chotta Nagpur Plateau in Deccan Peninsula from 21st October to 3rd November 2021. A total of 5485 specimens under different faunal group comprising 688 species were identified. Among them Trichopteran insects *Euclimacia similis* Kaur, Pandher, Chandra & Dubey 2021; *Euclimacia nicobarica* Kaur, Pandher, Chandra & Dubey 2021 and a freshwater fish *Garra triangularis* Shangningam, Rath & Kosygin, 2021 were new to science while an Arachnid *Psechrus hartmanni* Bayer, 2012 has been reported as new to India. Sixty DNA barcodes have been generated for the faunal groups Thysanoptera, Isoptera and Pangolin and submitted to BOLD. Altogether 42 species were augmented to National Zoological Collections which include ciliates, soil nematodes, crustaceans, mollusc, Trichoptera, Hymenoptera, Annelid and Reptile. Evaluated 2 PBRs of Pachim Bardwan District and 8 PBRs of Purba Bardwan District of West Bengal and submitted the report to West Bengal State Biodiversity Board. Revised list of faunal species under Schedule I and II for the proposed amendment of

Wildlife (Protection) Act, 1972 has been prepared by holding a consultation meeting with the Scientists of ZSI headquarters and Regional Centres at ZSI Headquarters on 9th and 10th November 2021 and submitted to the administrative Ministry. Participated in 'World Heritage Week' organized at Kolkata during 19th to 25th November 2021 by putting up the stall of ZSI and the key activities of ZSI have been displayed. Organized

an International Webinar on *Orthoptera: Integrated approach, prospects and challenges* with the participation of 60 researchers and academicians. Preamble on constitution day was read by all the Officers and staff members along with the Director, Dr. Dhriti Banerjee.



Reading of Preamble on Constitution Day



Streak-throated Barwing *Actinodura waldeni* Godwin-Austen, 1874 from Valmiki Tiger Reserve

NORTH EASTERN REGIONAL CENTRE, SHILLONG, MEGHALAYA

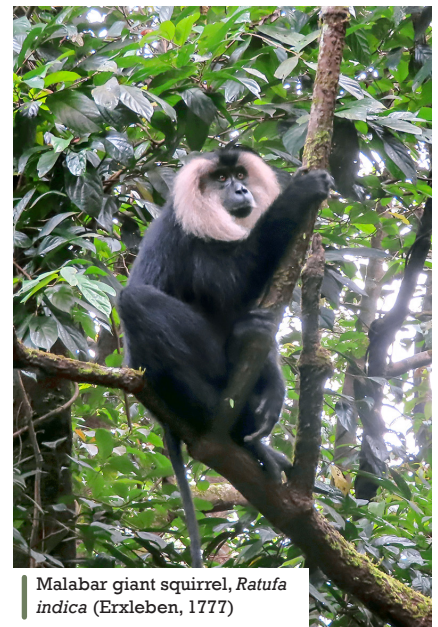
Collections were made from various groups viz., Pisces, Amphibia, Mollusca, Crustacea, Lepidoptera, Hymenoptera, Odonata and aquatic insects by conducting a survey to Manipur under the program "Studies on the aquatic and semi-aquatic Hemiptera of important floodplain Wetlands of the Central Valley of Manipur, North-East India" from 10th to 19th November, 2021. Scientists have identified 204 specimens containing 53 species. Two identification and advisory services provided to Forest officer, East Khasi Hills, Meghalaya and National Institute of Science Education and Research, Bhubaneswar.

WESTERN REGIONAL CENTRE, PUNE, MAHARASHTRA

Survey conducted to Silent Valley National Park and Parambikulam Tiger Reserve on 7th to 18th November 2021. Scientists have Identified 78 species containing 385 specimens from Decapoda, Coleoptera, Lepidoptera and Amphibia. Identification of the confiscated specimen of Indian Peafowl (*Pavo cristatus*) was done for the Forest Range Officer, Nandgaon, Nashik district, Maharashtra.



Lion-tailed macaque, *Macaca silenus* (Linnaeus, 1758)



Malabar giant squirrel, *Ratufa indica* (Erxleben, 1777)

CENTRAL ZONE REGIONAL CENTRE, JABALPUR, MADHYA PRADESH

157 examples containing 55 species identified from Lepidoptera, Arachnida, Amphibia and Reptilia. One species was augmented to the NZC of CZRC, Jabalpur. Reviewed one manuscript for JBNHS.



Caleta decidia
(Hewitson, 1876)

Delias eucharis
(Drury, 1773)

DESERT REGIONAL CENTRE, JODHPUR, RAJASTHAN

Xylocopa pubescens
Spinola, 1838



Preamble reading on Constitution day

Faunistic survey was conducted from 05th to 19th November 2021 under the project Studies on Diversity of Pollinating Bees (Apoidea: Hymenoptera) of Semi-Arid and Desert Ecosystem. Altogether 58 species (5 species of Gastropoda, 47 species of insects, & 6 species of Pisces) containing 490 examples were identified.

NORTHERN REGIONAL CENTRE, DEHRADUN, UTTARAKHAND

Scientists of the centre examined 396 specimens and identified 68 species (i.e. 5 spp. of Protozoa; 12 spp. of Phthiraptera; 28 spp. of Lepidoptera; 13 spp. of Annelids; 9 spp. of Pisces and 1 sp. of Amphibia). The Centre organized a training programme on Faunal Diversity of India for 48 Forest Range Officer Trainees of 2020-22 batch of Forestry Training Academy, Haldwani, Uttarakhand on 18th November 2021. Scientist of the Centre participated in Management Effectiveness Evaluation programme of Protected Areas and visited the four wildlife sanctuaries (namely Shimla Catchment, Chail, Rupi-Bhaba and Simbalbara) of Himachal Pradesh from 7th to 12th November 2021. One Ph.D. Thesis evaluated by the scientist of the Centre for Manonmaniam Sundaranar University, Tirunelveli, Tamil Nadu. The Constitution Day celebrated by reading the preamble and provided information on Constitution of India to the participants on 26th November, 2021.

Forest Range Officer Trainees of 2020-22 batch of Forestry Training Academy, Haldwani, Uttarakhand



Constitution Day celebrated on 26 November, 2021

SOUTHERN REGIONAL CENTRE, CHENNAI, TAMIL NADU

The scientists of the centre identified and registered 604 specimens containing 120 species of various faunal groups viz. Zooplankton, Lepidoptera, Odonata, Hemiptera, Blattodea, Psocoptera, Mollusca, Pisces, and Reptiles. The Mayfly *Platybaetis selvai* Kubendran, Vasanth & Subramanian, 2021 was discovered from Eastern Himalayas and a Psocoptera, *Ectopsocus cinctus* Thornton, 1962 recorded for the first time from Jharkhand.



Brown Headed Storkbilled Kingfisher
Pelargopsis capensis Linnaeus, 1766

GANGETIC PLAINS REGIONAL CENTRE, PATNA, BIHAR

Survey conducted from 18th October –18th November 2021 to Arunachal Pradesh. 571 examples under 51 species including 20 species of Mollusca and 31 species of Lepidoptera were identified. Reviewed one manuscript for *Records of Zoological Survey of India*. An animal exhibition was organised for Nehru Yuva Kendra, Patna on 02.11.2021.

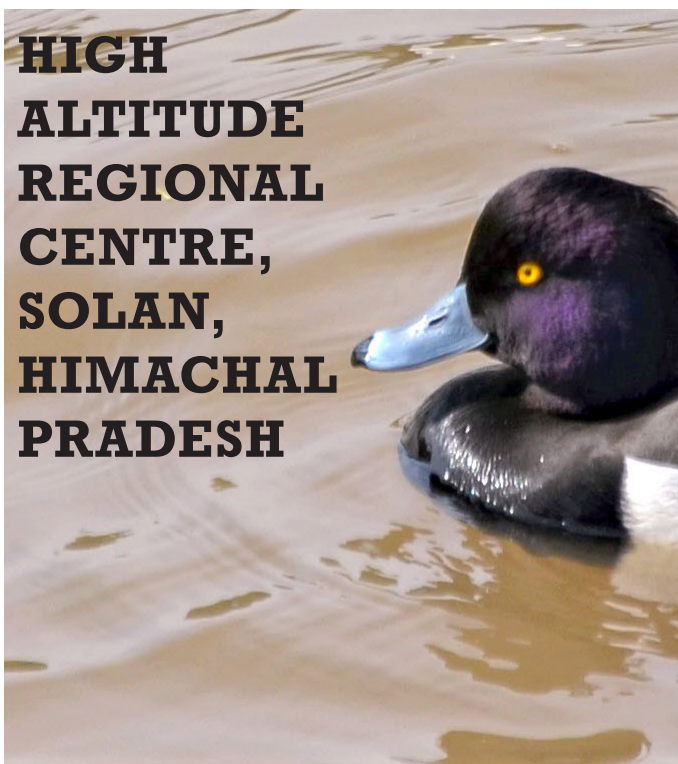


Casminola johannstumpfi Laszlo
Ronkay and Witt 2010



Melanoides tuberculatus O. F.
Müller, 1774

HIGH ALTITUDE REGIONAL CENTRE, SOLAN, HIMACHAL PRADESH



A survey is being conducted to collect and rear mayflies to study the association of larva and adult in the districts of Kullu and Mandi (Himachal Pradesh) w.e.f. 24th November to 05th December 2021. Scientists of this Centre registered and digitised 201 specimens of 39 species containing Lepidoptera, Orthoptera,

Tufted Duck
Aythya fuligula
Linnaeus, 1758

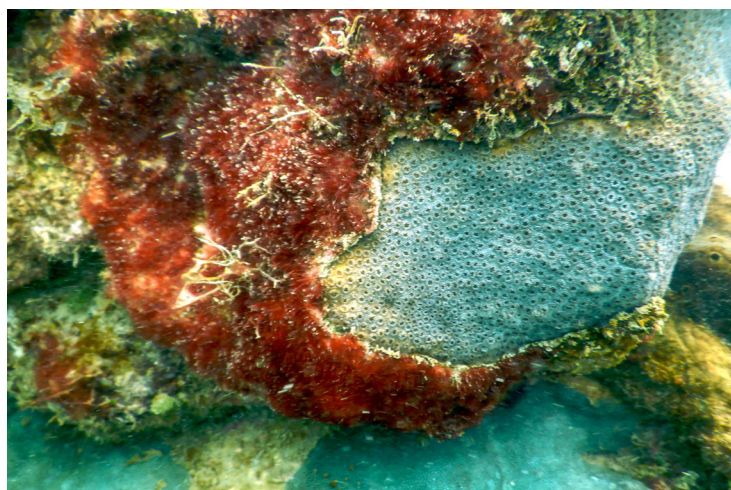
Amphibia and Reptilia. As part of identification and advisory services, identified 05 photographs of Lepidoptera for Department of Entomology, PAU, Ludhiana and corrected two M.Sc Dissertation of Eternal University Baru Saheb, Sirmour, Himachal Pradesh. Dr. Avtar Kaur Sidhu, Scientist-E gave training to Miss Pragati Rawat (Enrollment No.- 01616300320) working for her M. Sc. Dissertation on Rearing & Bioassay of *Spodoptera litura* (Fab.) (Lepidoptera: Noctuidae) on: ornamental plant (*Platycladus orientalis*) & economically important plants (*Curcuma longa* & *Murraya koenigii*) in University School of Environment Management, Guru Gobind Singh Indraprastha University, Sector 16C Dwarka, New Delhi.



Lycaena phlaeas Linnaeus, 1761

MARINE BIOLOGY REGIONAL CENTRE, CHENNAI, TAMIL NADU

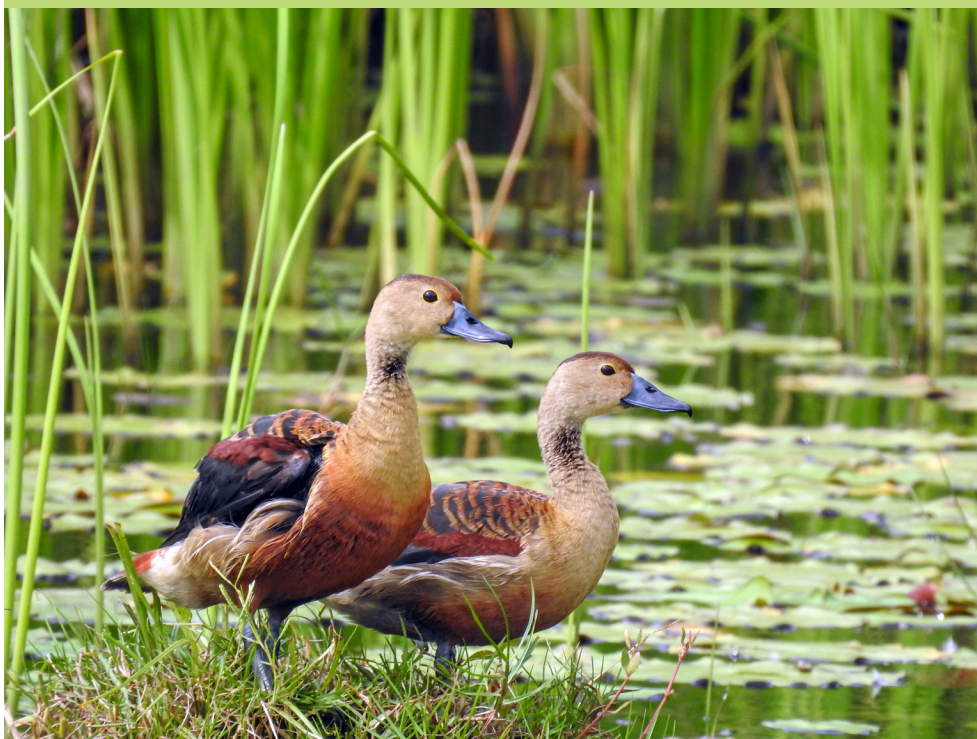
Algal
overgrowth
on coral



Clypeaster servens
Koehler, 1922

The centre's scientists identified 14 species of moss inhabiting testate amoebae, 06 species of Marine Sponges, 07 species of Nematodes, 04 species of marine Crabs, 05 species of Mollusca and 06 species of Echinoderms this month. Seventy-five fish species were collected from the landing centres in Diamond Harbour, Kolkata, Kasimedu fishing harbour, Chennai for otolith studies. In connection with the coral translocation project, a survey tour undertook to Narara, Gulf of Kachchh, from 17th – 29th November 2021, to oversee the translocation of corals from the sub-tidal locations where the IOCL has planned for laying a new pipeline.

ANDAMAN AND NICOBAR REGIONAL CENTRE, PORT BLAIR



Lesser Whistling Duck *Dendrocygna javanica* Horsfield 1821

Fifteen days long-term surveys were conducted from 11th to 25th November 2021 to North & Middle Andaman to study the terrestrial faunal diversity in agroecosystem and six days local surveys were conducted to South Andaman i.e., Mount Harriet, Hope Town, Shaitan Khadi, Ferrargunj, Badabalu, Chidiyatappu, Shoalbay 15, Kalatang, Bimblitan, Calicut, to assess the terrestrial faunal diversity; Burmanallah, Kodiaghat, Rangachang, off Hornbill Resort, Chatham, Science centre to assess the marine faunal diversity. A total of 195 species comprising of Annelida - 1 species; Decapoda - 21 species; Thecostraca (Barnacles) - 1 species; Stomatopoda - 1 species; Chlorophyta (Sea weed) - 1 species; Fishes - 21 species; Echinodermata - 11 species; Mollusca - 45 species were identified from the marine environment; and Orthoptera - 1 species; Hemiptera - 6 species; Coleoptera - 1 species; Odonata - 1 species and Lepidoptera - 84 species were identified from the terrestrial environment. Identified 10 specimens of sea cucumber for the Department of Environment & Forests, Andaman & Nicobar Islands.



Crimson Sunbird *Aethopyga siparaja nicobarica* Hume 1873

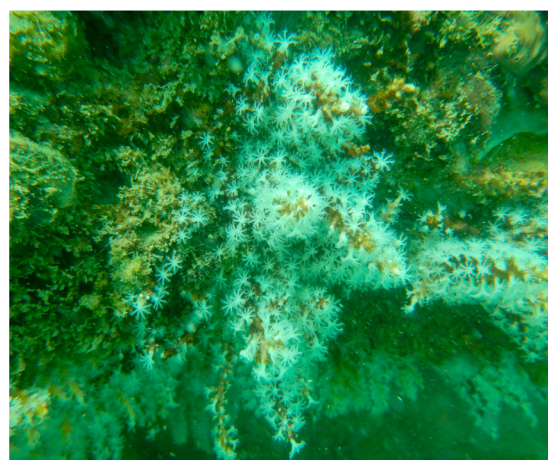
SUNDERBAN REGIONAL CENTRE, CANNING, WEST BENGAL



Dugong dugon
(Muller, 1776)

Local surveys conducted in Kakdwip, Namkhana, Dabu on 17th, 18th & 21st November 2021. During the month, 1340 examples with 104 species have been identified which contains Echinodermata, Cnidaria, Mollusca, Pisces and Reptilia. A total 40 species under Crustacea, Echinodermata, Cnidaria, Mollusca, Pisces and Reptilia were augmented to National Zoological Collections.

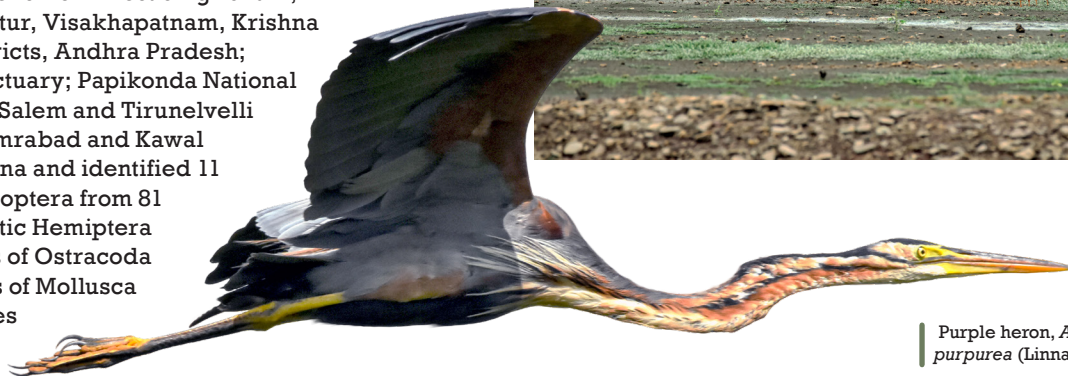
Carijoa riisei (Duchassaing & Michelotti, 1860)



FRESHWATER BIOLOGY REGIONAL CENTRE, HYDERABAD, TELANGANA

The scientists, staff and research scholars of the centre examined 1027 specimens from West Singhbhum, district Jharkhand; Guntur, Visakhapatnam, Krishna and East Godavari districts, Andhra Pradesh; Rollapadu Wildlife Sanctuary; Papikonda National park, Andhra Pradesh; Salem and Tirunelveli districts Tamil Nadu; Amrabad and Kawal Tiger Reserve, Telangana and identified 11 species of Aquatic Coleoptera from 81 exs., 11 species of aquatic Hemiptera from 14 exs., 12 species of Ostracoda from 96 exs., 31 species of Mollusca from 529 exs., 57 species of Butterflies from 90 exs., 2 species of Decapoda from 5 exs., 1 species of Terrestrial Hemiptera from 2 exs., 1 species of Odonata from 2 exs., 2 species of Blattodea from 3 exs., 36 species of fishes from 201 exs., during the month. 230 specimens of National Zoological Collections were digitized. One survey tour to faunal inventorisation of smart cities of Andhra Pradesh

Bar-headed goose, *Anser indicus* (Latham, 1790)



Purple heron, *Ardea purpurea* (Linnaeus, 1766)

(Amravathi and Visakhapatnam) from 8th to 22nd November, 2021 was conducted. An Identification and advisory service rendered to Bioscience Research Foundation, Chennai. Twenty five DNA barcodes were submitted to NCBI and BOLD.

WESTERN GHAT REGIONAL CENTRE, KOZHIKODE, KERALA

Ceratantis ghatei Roy &
Svenson, 2007

Scientists of the Centre identified 71 species (Hymenoptera 52 spp., Araneae 02 spp., Mantodea 08 spp., Scolopendromorpha 01 sp., Scorpiones 01 sp. and Coleoptera 07 spp.) from 211 examples. Six new species of Hymenoptera have been published.

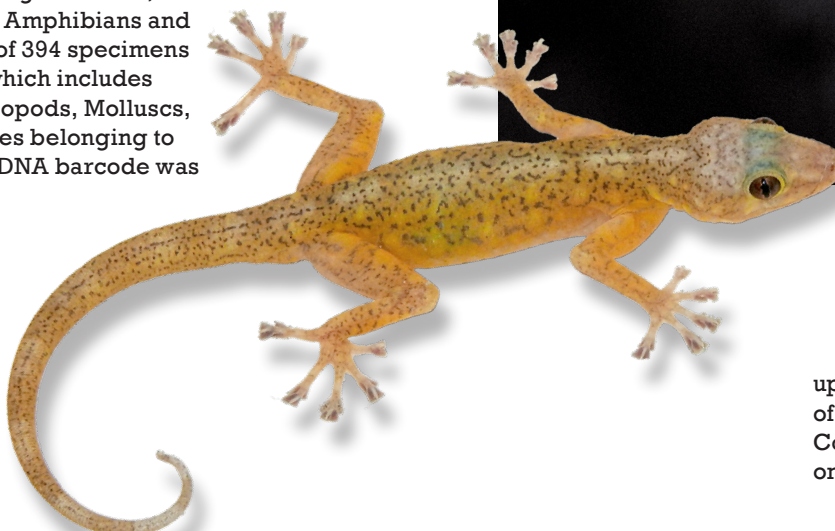
Team of Rapid Biodiversity assessment survey of Ranni forest division, by Kerala forest department led by ZSI



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

Survey conducted to Lakhari Valley Wildlife Sanctuary on 2nd November 2021 and 205 specimens were collected belonging to Insects, Molluscs, Fishes, Amphibians and Reptiles. A total of 394 specimens were identified which includes Insects, Crabs, Isopods, Molluscs, Fishes and Reptiles belonging to 73 species. One DNA barcode was

Calodactylodes aureus (Beddome 1870)



Taphozous melanopogon
Temminck, 1841



uploaded in the NCBI database. Staffs of this Centre took pledge on the Constitution day. Scientist reviewed one MS for *Journal of Fish biology*.

ARUNACHAL PRADESH REGIONAL CENTRE, ITANAGAR

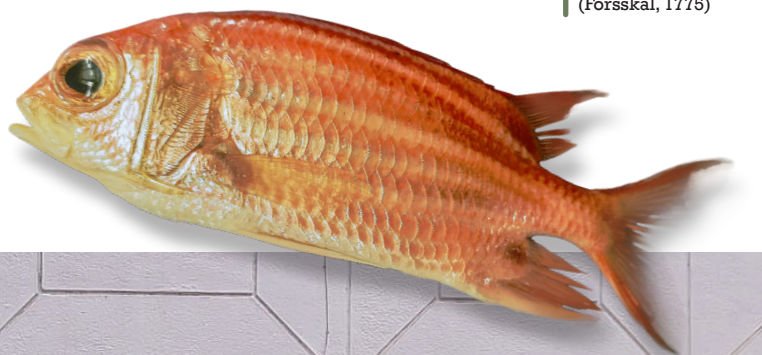
Ypthima sakra
Moore, 1857



Four local surveys conducted by scientists of the centre and collected samples of Lepidoptera, Orthoptera, Hymenoptera, Coleoptera, Mollusca, Decapoda, Amphibia and Reptilia. 61 species from 306 specimens have been identified.

MARINE AQUARIUM AND REGIONAL CENTRE, DIGHA, WEST BENGAL

Sargocentron rubrum
(Forsskal, 1775)



Reading of Preamble
of Constitution on 26th
November 2021



Local surveys conducted from 09th & 21st November 2021 and 02nd, 05th, 21st & 26th November 2021 to Petuaghat & fish landing center. Scientist of this centre have identified total 388 specimens containing 75 species belonging to 210 ex. of Mollusca (36 spp.), 159 ex. of fishes (30 spp.) Sea Pen (02 spp.) and 09 ex. of Crab (07 spp.) and deposited in National Zoological Collection. Evaluated one Ph.D. thesis for Bharathisadan University, Trichy, Tamil Nadu. Scientists of the centre supervised project reports on Marine biodiversity of Digha Coast and around by 5 Govt. Higher Sec. schools of Purba Medinipur District, in connection with Wipro Earthian Paryavaran Mitra project 2021-22.

NEW DISCOVERIES AND NEW RECORDS

NEW SPECIES



Garra triangularis Shangningam, Rath & Kosygin, 2021



Spilomena attenboroughi Tessa, Sureshan & Binoy, 2021



Spilomena fulvopleuris Tessa, Sureshan & Binoy, 2021



Spilomena reticularis Tessa, Sureshan & Binoy, 2021



Spilomena sahyadriensis Tessa, Sureshan & Girish Kumar, 2021



Spilomena tsunekii Tessa, Sureshan & Girish Kumar, 2021



Spilomena tuberculata Tessa, Sureshan & Girish Kumar, 2021

NEW RECORD

Psechrus hartmanni
Bayer, 2012



PUBLICATIONS

BOOK

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2. Ashigha, I. V., Sen, S. & Sureshan, P. M. 2021. First record of *Psechrus hartmanni* Bayer, 2012 (Araneae: Psechridae) from India. *Far Eastern Entomologist*, 441: 13-16. doi:10.25221/fee.441.3
3. Bahuguna, A., Singh, A. and Majumdar, S. 2021. Molecular characterization of species of *Fejervarya* (Amphibia:Anura:Dicroglossidae), known to be a culinary delicacy, used as novelties, curious: A study to focus their conservation. *International Journal of Global Science Research*, 8 (2): 1518-30. DOI 10.26540.
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9. Dr. C. Raghunathan, Scientist-E chaired the interview for recruitment of JRF under DST sponsored project on Diversity of Whiteflies in Andaman and Nicobar Islands held on 25th November 2021.
10. Dr. C. Raghunathan, Scientist-E chaired the viva voce examination of the dissertation submitted by the students of Post Graduate Diploma in Taxonomy on 22nd November 2021.
11. Dr. C. Raghunathan, Scientist-E attended the Lakshadweep Coastal Zone Development Authority meeting on 30th November 2021 as an Expert Member.
12. Dr. C. Raghunathan, Scientist-E served as an External Examiner for Ph.D. viva voce examination in Department of Oceanography and Coastal Area Studies, Alagappa University, Karaikudi, Tamil Nadu on 26th November 2021.
13. Dr. C. Raghunathan, Scientist-E served as Doctoral Committee member for CSIR-NEERI, Hyderabad and attended the meeting on 8th November 2021.
14. Dr. C. Raghunathan, Scientist-E attended the meeting on Marine Species Conservation held at MoEFCC, New Delhi on 12th November 2021 and expressed the ZSI view on the protection of *Rochia nilotica*, Sea cucumber and Saltwater Crocodile.
15. Dr. C. Raghunathan, Scientist-E attended the meeting to discuss the Pan India Seaweed Project organized by CSIR-CSMCRI, Bhavnagar, Gujarat on 24th November 2021.
16. Dr. C. Sivaperuman, Scientist-E attended meeting of Institutional Human Ethical Committee at Regional Medical Research Centre, Port Blair on 2.11.2021; served as an Expert Member for selection of various research position in different project at Regional Medical Research Centre, Port Blair on 9th & 10th November 2021; served as an Expert Member in Research & Advisory Committee at Department of Environment and Forests, A & N Islands on 24th November 2021; attended meeting with PCCF, Department of Environment and Forests on 24th November 2021 in connection with the approval for Tagging of Leatherback Turtle; served as an Member secretary for selection of Ph.D. Scholars at ANRC on 25th November; Conducted two Ph.D. synopsis seminar on 26th November 2021; Conducted interview for selection of trainees for the Certificate course on Para-taxonomy including People's Biodiversity Register (PBR) & Bird watching and basic ornithology under the Green Skill Development Programme (GSDP) on 8th November 2021.

MEETINGS ATTENDED

1. Dr. Dhriti Banerjee, Director, ZSI has participated and pursued various activities in Swachata Campaign from 2nd October, to 1st November, 2021.
2. Dr. Dhriti Banerjee, Director, ZSI has chaired the meeting for assessment of Threatened Indian Fauna held on 10th November 2021 at ZSI, Headquarters.
3. Dr. Dhriti Banerjee, Director, ZSI has attended the first Indian Pollinator Initiative General Body Meeting on 27th November, 2021 and also conducted ICAR-NBAIR meeting on 17th November, 2021.
4. Dr. Dhriti Banerjee, Director, ZSI convened International webinar on Orthoptera: Integrated approach, Prospects & Challenges on 2nd November 2021.
5. Dr. Dhriti Banerjee, Director, ZSI convened DSI Meeting on 12th November, 2021.
6. Dr. Dhriti Banerjee, Director, ZSI addressed in a webinar 'Back to School' Season 2 at Mahadevi Birla World Academy, Kolkata on 22nd November, 2021.
7. Dr. Dhriti Banerjee, Director, ZSI has Chaired the Consultative meeting of Regional Centers on 29th and Head Quarters on 30th November, 2021.
8. Dr. C. Raghunathan, Scientist-E chaired the meeting for amendment of Wildlife (Protection) Act, 1972 by proposing new list of species under Schedule I and II held at ZSI headquarters on 9th and 10th November 2021.

17. Dr. K. A. Subramanian, Scientist-E attended discussion meeting on Wildlife (Protection) Act, 1972 at ZSI, Kolkata from 9-11th November, 2021.
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18. Dr. K. A. Subramanian, Scientist-E attended internal audit meeting on 17th November 2021 organized by MoEF & CC.
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19. Dr Deepa Jaiswal, Scientist-E attended Quarterly Board meeting of Andhra Pradesh State Biodiversity Board on 2nd November 2021; Dr Deepa Jaiswal, attended meeting regarding Project discussion on Biosurvey of Eastern Ghats organised by Andhra Pradesh State Biodiversity Board on 9th November 2021.
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20. Dr. Basudev Tripathy, Scientist-E & Dr. K.P. Dinesh, Scientist-D attended a meeting on discussion for Amendment on Wildlife (Protection) Act, 1972, organized by ZSI HQ, Kolkata on 9th and 10th November 2021.
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21. Dr. M.J. Palot, Scientist-B attended the state level meeting of the People Biodiversity Register Quality Evaluation Monitoring Committee (through online platform) as an expert committee member organized by the Kerala State Biodiversity Board, Thiruvananthapuram on 23rd November 2021.
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22. Dr. D. S. Suman, Scientist-D attended Central Insecticide Board (CIB) Meeting organized by DGHS, New Delhi on 11th November 2021.
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23. Dr. D. S. Suman, Scientist-D attended online meeting on “Malaria No More India” organized by Science, Technology, and Innovation Conclave on 25 November 2021
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24. Dr. Gaurav Sharma, Scientist-E participated in the Consultation meeting on Training Course on “New Tools and Techniques for preparation of Working Plans for Integrated Forest and Biodiversity Management and its implementation” organized by The Director, Indira Gandhi National Forest Academy, Dehradun on 17 November, 2021.
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25. Dr. Gaurav Sharma, Scientist-E participated in State level PBR Evaluation Committee meeting organized by the Chairman, Uttarakhand Biodiversity Board, Dehradun on 22 November, 2021.
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26. Dr. Indu Sharma, Scientist-E undergone training, Science administration and Research Management organized by Administrative, staff college of India, Bella Vista, Hyderabad online through Webex platform from 15th to 26th November, 2021. Presented an invited lecture via Power Point Presentation about ZSI, Research activities and its achievements on 22nd November, 2021. Dr. Indu Sharma, Scientist-E attended the 11th meeting of Rajasthan State Biodiversity Board online held on 16.11.2021 under the chairmanship of the Chairman, Rajasthan State Biodiversity Board as a special invitee.
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27. Dr Gopal Sharma Scientist E participated in a State level seminar on Revival of traditional water resources in Climate Change on 26.11.2021 at A N Sinha Institute, Patna and delivered a lecture on Climate Change and its present challenges; attended Preparatory meeting for Range-wide estimation of River Dolphin in the Ganges River System with the scientists of WII, Dehradun on 09.11.2021.
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28. Dr. Avtar Kaur Sidhu, Scientist-E attended Workshop on Settlement internal audit paras of Zoological Survey of India, hosted by MOEFCC and DZSI on 17.11.2021.
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29. Dr Navneet Singh, Scientist E attended the meeting from November 9 to 10, 2021 related to finalisation of Fauna species listed in schedules of Indian WL (Protection) Act, 1972, and the WPA amendment bill revision suggestions by ZSI.
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30. Dr. A.S. Kalawate, Scientist-D attended two weeks training programme on Science Administration and Research Management (SARM) organized by the ASCI, Hyderabad and sponsored by the DST from 15th to 26th November 2021; attended two days workshop on IMAGE software programme organized by the Biologia Life Science LLP, Maharashtra from 15th to 16th November 2021; attended three days online workshop on GIS mapping using Q-GIS organized by the Biologia Life Science LLP, Maharashtra from 22nd to 24th November 2021.
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31. Dr. B. Sinha, Sci- E attended the virtual Internal Audit-Workshop on Settlement (Zoological Survey of India) organised by MoEFCC on 17th November 2021.
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32. Dr. Pratyush P. Mohapatra, Scientist-D attended meeting on finalization of Wild Life (Protection) Act, 1972 Amendment Bill and to give inputs on Marine species conservation w.e.f. 06/11/2021 to 15/11/2021.
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33. Dr. Anil Mohapatra, Scientist-E attended meeting on finalisation of Wildlife Protection Act, 1972 amendment bill during 09.11.2021 to 10.11.2021 at Zoological Survey of India, Kolkata.
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34. Dr. Chitra J, Scientist – C attended online training for Science Administration and Research management (SARM) from 15th November to 26th November by Administrative Staff College of India, DST.
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35. Mrs. Anindita Ghosh, Asst. Zool. attended a Training Programme on “Statistical Tools and Techniques” scheduled during 29 Nov,

2021 to 30 Nov, 2021 at Institute of Secretariat Training & Management (ISTM).

36. Dr. J. Dasgupta, Sr. Zool. Asst. attended 3 days online RTI training programme from 1st to 3rd November, 2021, organized by Institute of Secretariat Training & Management, Department of Personnel & Training, Ministry of Personnel Public Grievances & Pensions, Govt. of India, New Delhi.

TRAININGS/ WEBINAR ORGANISED

1. ZSI, Headquarter organized an International Webinar On Orthoptera: Integrated Approach, Prospects & Challenges on 2nd November 2021.

LECTURES DELIVERED

1. Dr. C. Raghunathan delivered a talk on the *Orthoptera, its diversity and economic benefits* on the inaugural session of Webinar on *Orthoptera: Integrated approach, prospects and challenges*.
2. Dr. C. Sivaperuman, Scientist-E delivered a talk on Biodiversity of A & N Islands to the science students of Jawahar Navodaya Vidyalaya, Middle Andaman on 15th November 2021; delivered a talk on Birds of A & N Islands and Ecosystem Services to the frontline staff, Department of Environment and Forests, North Andaman Forest Division on 20th November 2021.
3. Dr Navneet Singh, Scientist E deliberated in a brain storming session on 'Classical and Molecular Taxonomy – Standalone or Complementary' organised by ICAR – National Bureau of Agricultural Insect Resources, Bengaluru on 18.11.2021. Dr Navneet Singh, Scientist E served as a resource person for one day field training of the student of PG Diploma Course in Integrative Animal Taxonomy-2021 on 16.11.2021.

4. Dr. D. S. Suman, Scientist-D delivered an invited lecture on Vectors and Vector borne diseases at Govt. PG College, Sheopur, MP on 11th November 2021.
5. Dr. Suresh Chand, Scientist-E delivered one lecture on "Food feeding and Biology of Orthoptera" in International webinar on Orthoptera organized by ZSI Headquarter on 2nd November 2021.
6. Mr. Atanu Naskar had taken a class on Collection, preservation and Identification of Diptera for the students of the PG Diploma Course in Integrative Animal Taxonomy-2021 on 8th November, 2021.
7. Dr. Gaurav Sharma, Scientist-E delivered a lecture on Faunal Diversity of India to 48 Forest Range Officer Trainees of 2020-22 batch of Forestry Training Academy, Haldwani, Uttarakhand at conference hall of ZSI, NRC, Dehradun on 18 November, 2021.
8. Dr. L. Kosygin Singh, Scientist, E, provided lecture cum demonstrations on Classification and identifications of Freshwater Fishes of India to the students of the Post Graduate Diploma in Integrative Animal taxonomy on 11-11-2021.
9. Dr. Pratyush P. Mohapatra, Scientist-D delivered a lecture on "Studies on Reptiles of India: Scopes and prospects" at St. Joseph's College (Autonomous), Natural Science Association, Department of Zoology, Bengalure, Karnataka through online mode.
10. Dr. L. Kosygin Singh, Scientist, E, guided one student of the Post Graduate Diploma in Integrative Animal taxonomy for her dissertation work on "Exotic fishes of East Kolkata Wetlands with special reference to invasive species".
11. Dr. M.J. Palot, Scientist-B delivered a lecture on 'Indian Wildlife (Protection) Act & Faunal wealth of Kerala- An Overview' for the Section & Beat Forest Officer trainees at the Kerala State Forest Training Institute, Walayar on 12th November 2021.



POST GRADUATE DIPLOMA IN INTEGRATIVE ANIMAL TAXONOMY -2021 ZOOLOGICAL SURVEY OF INDIA KOLKATA

First batch of Post Graduate Diploma course students with
Director and Officers of ZSI

SUPERANNUATION

Dr. Vinita Sharma superannuated as Scientist E from ZSI-
Northern Regional Centre, Dehradun.
Shri Alok Das, Field Attendant, Wildlife Section, ZSI
Headquarters superannuated from ZSI, Headquarters.
Shri Nangram Tale, superannuated as MTS from Arunachal
Pradesh Regional Centre, Itanagar