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May 2015

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ZSI in the 100th year of Service to the Nation (1916 to 2015)

Biodiversity is key to the survival of life on earth. The vast diverse life forms specially the faunal components are so numerous that we are yet to identify the role each one of them play in the ecosystem. The Zoological Survey of India (ZSI) through its taxonomic expertise is perhaps the only organisation that is playing an important role in identification of fauna from the smallest Protozoa to the largest Mammalia. To recognise and honor the pivotal role that biodiversity plays in survival of life on earth 22nd May is celebrated as the The International Day for Biological Diversity (IDB). On this day in 1992, the text of the Convention on Biological Diversity (CBD) was adopted. To mark this, 22nd May has been proclaimed by the United Nations as the International Day for Biological Diversity, to increase awareness about the importance of and threats to biodiversity. The theme this year, 'Biodiversity for Sustainable Development'

sends out the clear message that development must go on but at the same time we must make efforts to conserve and protect the rich biodiversity. ZSI is contributing towards conservation of biodiversity through its taxonomic research by discovering species new to science and documenting species, preparing faunal inventories, by maintenance and preservation of the type specimens as well as the 4 million voucher specimens, dissemination and capacity building of taxonomic knowledge and spreading conservation awareness.

This year also ZSI celebrated the IDB through different programmes like exhibition of faunal collections highlighting their importance and role they play in conservation of biodiversity, and also organised awareness programmes for students on importance of biodiversity.

Dr. Kailash Chandra
Zoological Survey of India, Kolkata

HEADQUARTERS, KOLKATA

Extensive field surveys were undertaken in the states of Maharashtra, Madhya Pradesh (Kanha National Park) and Dooars region of Northern West Bengal. One local tour was conducted in Raidighi fish landing center of Sunderbans in connection to the project "Diversity of Sharks & Rays in different landing centers of Sunderbans. During the month, the scientists of Headquarters identified, 4 species of Protozoa from Assam, 9 species of Platyhelminthes, 7 species of earthworms, 2 species of crabs and 2 species of stomatopods from Sunderban Biosphere Reserve, 1 species of shrimp, 2 species of isopods, 1 species of stomatopod and 19 species of crabs from Kerala, 5 species of crustaceans and 5 species of beetles from Himachal Pradesh. Seven species of Collembola were identified from Duars region of Northern West Bengal and Shola grasslands of Western Ghats. Ten species of mantids, 4 species of Coleoptera, 31 species of Hemiptera, 5 species of Hymenoptera and 12 species of Lepidoptera were identified from Andaman & Nicobar Islands, 10 species of fresh water fishes, 25 species of marine fishes and 3 species of mammals from the States of Himachal Pradesh, Maharashtra, Andhra Pradesh, Assam, Kerala, Gujarat, Rajasthan, Tamil Nadu, Uttarakhand, Odisha, Chhattisgarh, Uttar Pradesh, West Bengal,

Andaman and Nicobar Islands. Three research papers were published, eight accepted and fifteen were communicated during the month. Identification and advisory services were rendered on twenty two lots of specimens, received from different institutions and organizations. Identification and advisory services was rendered to Dr. Dipti Raut, Assistant Professor, Ravenshaw University, Cuttack on estuarine crabs of Odisha coast. Crab specimens collected from Devi estuary were found to belong to 24 species. An identification report of fish specimens was sent to Dr. Kousik Pramanick, Asst. Professor, Department of Biological Science, Presidency University, Kolkata; Dr Ranu Naskar, Asst. Professor, Zoology Department, Jogamaya Devi College, Hazra More, Kolkata on brachyuran crabs of Sundarbans, burrow pattern, population ecology etc. and to Pforini Jane Sapriina and Mebari V.R. DoePhang, PG students from Loyola College Chennai, regarding the taxonomical study of freshwater shrimps. Dr. Gaurav Sharma, Sci. D and Officer-in-Charge of Mammal and Osteology Section identified 02 bones (part of upper jaw and horn) belonging to Gaur, *Bos gaurus* Smith and also 01 vertebral bone belonging to Asiatic Elephant, *Elephas maximus* Linnaeus, 1758 and 02 bones belonging to Wild Boar, *Sus scrofa*

Linnaeus. He also identified seized material received from the Regional Deputy Director, Wildlife Crime Control Bureau (WCCB), E/R, Kolkata and identified that material as ivory belonging to Asiatic Elephant, *Elephas maximus*. An internship programme for two M. Sc. (Advance Zoology and Biotechnology) students from Loyola College, Chennai has been successfully conducted for one month from 1st to 31st May, 2015, in the Freshwater Fish Section of ZSI. They were given training on measurement of morphological characters, counting of fin rays and scales and identification of more than 50 specimens of freshwater fishes up to species level using taxonomic keys. Dr. Kailash Chandra, Sci-F, attended the World Biodiversity Day seminar held at Science city organized by West Bengal Biodiversity Board (WBB), Salt lake, Kolkata along with Shri. K.C. Gopi, Sci. E and Dr. L. Kosygin Singh, Sci. D and Dr. Chitra, Assistant Zoologist on 22nd May, 2015.

Dr. Kailash Chandra rendered identification of a cetoniid beetle to Dr. Amol Balbhim Mamalayya, Asst. Professor, Department of Zoology, K. B. P. College, Pandharpur, District Solapur (M.S.) India. He also attended the 30th Regional Council Meeting (JCM) at Northern Regional Centre, ZSI, Dehradun on 8th May 2015. Dr. K. Venkataraman, Director, ZSI, as a member of that committee, attended the meeting held at MoEF&CC, New Delhi on 3rd and 4th May, 2015 regarding National

Biodiversity Authority Programme. He also attended the Regional Council Meeting held at NRC, ZSI, Dehradun on 8th May, 2015 as chairman of the RCM and also attended the Departmental Council Meeting held at MoEFCC, New Delhi. A National Seminar on Conservation Biotechnology and DNA barcoding organized by Gujarat Biodiversity Gene Bank (GSBTM), Dept. of Science & Technology, Govt. of Gujarat on 18th and 19th May, 2015 and also a meeting of the expert committee on Access and Benefit Sharing at National Biodiversity Authority, Chennai on 28th May, 2015, were attended by him.

Publications

- Parbati Chatterjee and Chitra J. 2015. Observation of Microsporidian parasite in the accessory salivary gland of *Chrysocorisstollii* Wolff (Heteroptera: Pentatomidae). *International Journal of Pure and Applied Zoology*. 3 (2): 119-121.
- Chitra J. 2015. Report on Protozoan fauna in Chintamani Kar Bird Sanctuary, West Bengal. *Journal of Academia and Industrial Research*, 3: 621 – 625.
- Shah S. K., Biswas O., Mazumder A. and Banerjee A. 2015. Indian Bagworms (Insecta: Lepidoptera: Psychidae). http://zsi.gov.in/Checklist/Psychidae_final_checklist.pdf

ANDAMAN & NICOBAR REGIONAL CENTRE, PORT BLAIR

Surveys at Cinque Island Sanctuary of South Andaman from 6th to 7th May 2015, North Andaman from 23rd to 28th May 2015 and 14 local surveys in South Andaman from 2nd to 22nd May 2015 were conducted. A total of 131 species comprising of 42 species of scleractinian corals, 2 species of soft corals, 7 species of sea anemones, 1 species of mollusc, 4 species of sponges, 8 species of crabs, 9 species of ascidians and 14 species of fishes were identified from marine environment while, 4 species of butterflies and 40 species of birds were identified/observed from terrestrial environment. Among them, 1 species of marine fish *Xanthichthys auromarginatus* (Bennett, 1832) was a new record to Andaman and Nicobar Islands. Detailed faunal report of Landfall Island Sanctuary, East Island Sanctuary and West Island Sanctuary were provided to the Divisional Forest Officer, Wildlife Division, Mayabunder on request for the preparation of Management Plan for the few important sanctuaries of North and Middle Andaman District. A checklist of migratory birds in view of the risk of Avian Influenza virus was given to the Divisional Forest Officer, Middle Andaman, a detailed report on recovered bird Wedge-tailed Shearwater *Ardenna pacifica* from Buniyadabad, Port Blair to the Range Officer, Zoo Range, Mini Zoo, Haddo, Port Blair and details of snake species found in Andaman Islands were provided to the Deputy Conservator of Forests, Wildlife Division, Port Blair on request. Dr. C. Raghunathan, Sci. D

and Officer-in-Charge, attended meeting pertaining to IGNFA and UNDP projects for capacity building of IFS officers on Biodiversity Conservation with special reference to Aquatic, Marine and Coastal Biodiversity held at Department of Environment and Forests, Port Blair on 1st May 2015. He also attended a programme to mark the completion of one year in office of the NDA Government, which was chaired by Hon'ble Lieutenant Governor of Andaman and Nicobar Islands on 25th May 2015. Dr. C. Sivaperuman, Sci. D, served as a member for selection of research Scientists under various research projects and the review meetings of the ongoing research project titled "Establishment of diagnostic virology laboratory on 11th May 2015 and attended IAEC meeting on 30th May 2015 at Regional Medical Research Institute, Port Blair. Mrs. Kamla Devi, Sci. B, provided information on freshwater fishes of Andaman and Nicobar Islands to the Scientists of CIARI, Port Blair on 8th May 2015 on request. Mr. P.T. Rajan, Senior Zoological Assistant prepared a question paper on marine biology for the final examination of the 48th batch of Forest Guards and also made physical inspection of dive centres and SCUBA diving equipment at Havelock Island, South Andaman on 14th May 2015. Mr. S. Rajesh Kumar, Senior Research Fellow, participated in a field trip along with the officials of Department of Environment and Forest to Cinque Island Sanctuary for the preparation of Management Action Plan from

6th to 7th May 2015 as per the request of Deputy Conservator of Forest, South Andaman.

Publications

- Tamal Mondal, Raghunathan, C. and Venkataraman, K., 2015. Diversity of Scleractinian Corals in Great Nicobar Island, Andaman and Nicobar Islands, India. *Proc. Zool. Soc.*, DOI 10.1007/s12595-015-0145-8
- Tamal Mondal, Raghunathan, C. and Venkataraman, K., 2015. Report of Newly Recorded Eight Scleractinian Corals from Middle and South Andaman Archipelago, India. *Global Journal of Science Frontier Research: C Biological Science*, 15(2):19-26.



Ascidian, *Polycarpa pigmentata*, Herdman, 1906



Reef Fish, *Pomacanthus annularis*, Bloch, 1787

- Sreeraj, C. R., Raghunathan, C., Raghuraman, R., Sudhanshu Dixit and Venkataraman, K., 2015. Polyclads of Andaman and Nicobar Islands: 1-100 (Published by the Director, *Zool. Surv. India*, Kolkata)



Ascidia, *Clavelina robusta*, Kott, 1990



Reef Fish, *Platax pinnatus*, Linnaeus, 1758



Sea Anemone, *Actinodendron glomeratum*, Haddon 1898

WESTERN GHAT REGIONAL CENTRE, KOZHIKODE (CALICUT)

During the month six local surveys were conducted to agroecosystems of Calicut. Four new species of Platygasteridae (Hymenoptera) were published, along with two new reports to India. Other identification works include, 4 species of Pteromalidae, 7 Platygasteridae, 1 Diapriidae (Hymenoptera), 22 Dermaptera, and 6 Lepidoptera. One scientific paper and three popular articles were published and two scientific papers were accepted for publication. Those submitted for publication included 8 research manuscripts and one popular article. Eight identification & advisory services were rendered to various students and researchers. Dr. P. M. Sureshan, Sci. D attended the 11th meeting of the advisory committee for ecosystem Research programme of MOEF, New Delhi at KFRI, Peechi on 13th and 14th May 2015. As part of official language implementation, Dr. K. Rajmohana Sci. D attended the subcommittee meeting of TOLIC (Town Official Language Implementation Committee), on 27th May 2015. She also served as Chairman at the 3rd Semester Practical exam of M.Sc. Zoology, for General Entomology and Systematics, on 29th May 2015, at Dept. of Zoology, University of Calicut. Dr. Muhamed Jafer Palot, Asst. Zoologist, delivered a talk on "Mangrove Biodiversity of Kerala" at a seminar on "Mangrove Conservation in Kerala" organized jointly by Kerala Forests & Wildlife Department, Koodu Nature Society, SEEK & Malabar Natural History Society at Shikshak Sadan Conference Hall, Kannur on 11th May

2015. He also delivered a talk on "Reptilian diversity of Kerala" at State level Residential Vacation Training programme for school students at Agro biodiversity Centre, M S Swaminathan Research Foundation (MSSRF), Kalpetta, Wayanad on 16th May 2015 organized jointly by MSSRF & Department of Biotechnology (DBT), New Delhi. Regarding the AICOPTAX Project on Pteromalidae (Hymenoptera), assigned to Dr. P. M. Sureshan, Sci-D., revision of the genus *Netomocera* Boucek, with 10 species including one new species was completed during the month. A key to the world species of *Netomocera* was also prepared. 8 local surveys were undertaken in Calicut district, Kerala, through which 75 specimens were collected. Dr. P. M. Sureshan and Dr. K. Rajmohana, supervised the research project of five research scholars each, at the Centre for their doctoral degrees. The latter also guided two students of Kannur University Mananthavady Campus, Wayanad for their M.Sc dissertation works. During the month, there were 182 visitors at the museum.

Publications

- Rajmohana K, Abhilash Peter and Ramesh Kumar A. 2014. *Encyrtoscelio* Dodd (Hymenoptera: Platygasteridae) from India, *Entomon*, 39(1) :1-14.
- Muhamed Jafer Palot. 2015 *Uragangal*: Paccholapambukal (Reptiles: Green Vine Snakes) *Koodu- Nature Magazine* in Malayalam. Vol.3(1): 46

- Muhamed Jafer Palot. 2015. *Kara kaackaana Kandal Vanangal* (Environmental Importance of Mangroves) *Koodu- Nature Magazine* in Malayalam. Vol.3(1): 8-12.
- Muhamed Jafer Palot. 2015. *Keralathile Kandal vana Sasyangal* (Mangrove plant diversity of Kerala) *Koodu- Nature Magazine* in Malayalam. Vol. 3(1): 13-16.



Field work at Thattekkad Bird Sanctuary, Kerala



Kani Bush Frog, *Pseudophilautus kani* (Biju Bossuyt)



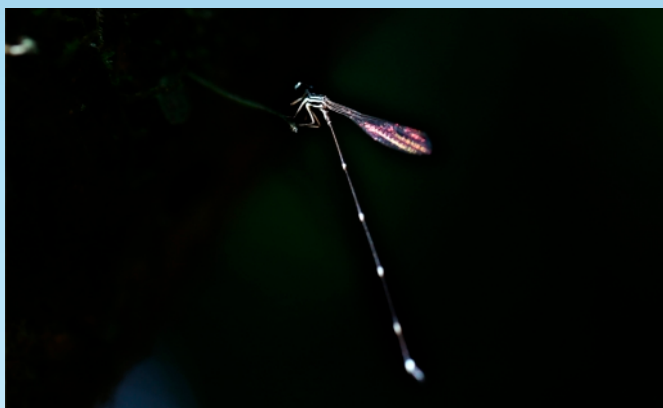
Malabar Torrent Dart, *Euphaea fraseri* (Laidlaw)



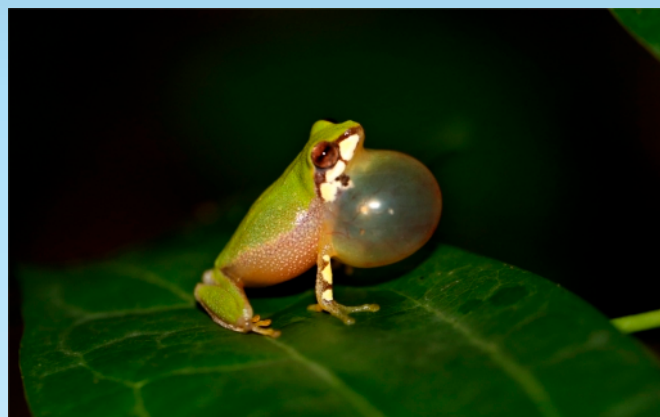
Southern Spotted Ace, *Thoressa astigmata* Swinhoe



Sahyadri Orange Ace, *Thoressa honorei* deiceville



Pied Reedtail, *Protosticta gravelyi* (Laidlaw)



Variable Bush Frog, *Raorchestes akroparallagi* (Biju Bossuyt)

ESTUARINE BIOLOGY REGIONAL CENTRE, GOPALPUR-ON-SEA

During the month 9 examples of molluscs belonging to 5 species under 4 genera and 4 families were identified from the collections of Brahmani and Baitarani estuarine Survey. A total of 34 specimens belonging to the order Hemiptera were identified under 3 families, 3 genera and 2 species. Five species of

Coleoptera under 2 families with three genera were identified from 6th survey of Subhadra Estuary, Ganjam, Odisha. 13 museum specimens were digitized. About 20 visitors including post graduate students visited the Centre.

SUNDERBANS REGIONAL CENTRE, CANNING

During the month, one local tour was conducted in Raidighi fish landing centre of Sunderbans in connection to the project "Diversity of Sharks & Rays in different

landing Centres of Sunderbans", and a total of 56 specimens which included 8 prawns, and 48 fishes including 1 ray fish were collected.



Raidighi Jetty in Moni River, Sunderbans



View of Dayapur village in Sunderbans

NORTHERN REGIONAL CENTRE, DEHRADUN

The scientists of the Centre identified the following fauna during the month: 1 species (5exs) of Acridoidea and 21 species (857exs) of Mollusca from Punjab; 5 species of Acridoidea, 7 species (29exs) of Soil Nematodes, 1 species (6exs) of Amphibia and 1 species (1ex) of Reptilia from Sonanadi WLS and 1 species (4exs) of Encyrtidae from Uttarakhand. DNA was extracted from 8 samples belonging to 7 species of butterflies and 10 samples belonging to 2 species of Lesser Cats. Amplicons of CIO genes were obtained from 9 samples belonging to 6 species of Lepidoptera and 4 amplicons of Cyt b gene obtained from 2 species of Lesser Cats. Also sent eight amplicons of COI genes belonging to 6 species of Lepidoptera for sequencing. 5 exs of Acridoidea and 857 exs of Mollusca from Punjab and 4 exs of Hymenoptera from Uttarakhand were

registered during the month. Seven specimens of soil nematodes, 4 of Encyrtidae and 121 of Mollusca identified during the month were entered as RFD Data. 20 slides of medulla of *Felis silvestris* Schreber were prepared for trichotaxonomy and 10 slides of Nematodes for morphological studies. Regional Council Meeting (RCM) was organized at NRC on 8th May'15, under the Chairmanship of Dr. K. Venkataraman, Director, ZSI and 30 members from Headquarters and regional centres, participated in the said RCM. Dr A.N. Rizvi, Sci. D, reviewed a manuscript on Soil nematode for an International Foreign Journal.

Guidance to ZSI-JRF on Approved Research Programme "Studies on the Helminthes Parasitic in Amphibia and Reptilia of District Dehradun" was provided by Dr A.N.Rizvi. 25 students, visited the Museum of NRC.



30th Regional Council Meeting held at the Centre



Team at the 30th Regional Council Meeting

MARINE AQUARIUM & REGIONAL CENTRE, DIGHA

During this month 89 specimens were identified which included 30 species of molluscs, 1 species of Brachiopoda and 1 species of Echinodermata. Aquarium renovation work through ICZMP, World Bank funded project has been going on.

Sea cucumbers (*Acaudina molpadioides*) in bycatches



FRESHWATER BIOLOGY REGIONAL CENTRE, HYDERABAD

The scientists of the Centre examined 12 specimens of freshwater benthic and fish samples collected from different wetland bodies of Andhra Pradesh & Madhya Pradesh and identified 2 species of molluscs and 4 species of fishes. As part of the digitization of

the National Zoological Collections of the centre, 2 species of molluscs and 4 species of fishes were digitized. Dr. Prasanna Yennawar, Sci. D, of the Centre served as member in the committee at Telangana State Biodiversity Board for selection of project personnel on 13th

May, 2015. Exhibits of faunal collections present in FBRC were displayed highlighting ZSI activities at the International Day for Biological Diversity on 22nd May, 2015 at



Notopterus notopterus

Indira Priyadarshini Auditorium, Nampally, Hyderabad organized by Telangana State Biodiversity Board.



Xenentodon cancila

ARUNACHAL PRADESH REGIONAL CENTRE, ITANAGAR

During the month 26 examples of old and recently collected reptiles have been studied and identified to belong to 1 order, 4 families and 14 species. 26 examples of recently collected fishes have been identified to belong to 2 orders, 3 families, 7 genera and 8 species. Dr. Bikramjit Sinha, Sci. C and Officer-in-Charge of the centre attended the 2nd meeting of the Standing Committee of State Board of Wildlife, Arunachal Pradesh in the office of PCCF, Itanagar on 8th May 2015 and in the same office on 11th May 2015, he attended a meeting of the Technical Committee of Protected Areas of Arunachal Pradesh. On invitation by the State Biodiversity Board, Arunachal Pradesh, Dr. Sinha delivered a lecture entitled “Realizing the importance of

biodiversity for sustainable development: the sooner the better” on the eve of International Biodiversity Day on May 22, 2015, at Hapoli, Lower Subansiri district, Arunachal Pradesh. He also participated as an expert on invitation, in a 3-day “National Consultation Workshop on Understanding Ecosystem Services Perspectives for Effective Resource Management in the Far Eastern Himalayan Landscape” jointly organized by GBPIHED & ICIMOD at Itanagar during 25-27 May, 2015. Dr. S. D. Gurumayum, Sci. C of the Centre undertook a survey to Mehao Wildlife Sanctuary from 30th April to 9th May 2015 and collected 441 faunal examples. She attended the 28th Hindi Conference and Workshop, from 14-16th May, 2015 at Kodaikanal, Tamil Nadu. She also

attended the National Consultation workshop on *Developing Livelihood Interventions for the Far Eastern Himalayan Landscape*, organised by GB

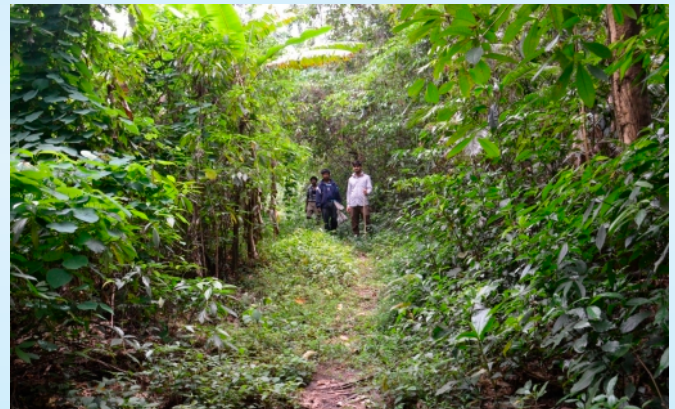
Pant Inst. of Him. Env. and Development, Itanagar and ICIMOD, Nepal on 28 to 29 May 2015 at Itanagar.



Green rat snake, *Ptyas nigromarginatus*



Asho Pani Rivr, Mehao Wildlife Sanctuary, Lower Dibang Valley, Arunachal Pradesh



Survey team in Mehao Wildlife Sanctuary, Lower Dibang Valley, Arunachal Pradesh

DESERT REGIONAL CENTRE, JODHPUR

During the month, identified and registered 11 species of fishes and digitized 43 specimens from NZC for RFD. Dr. Sanjeev Kumar, Sci. D conducted a survey of Great Indian Bustard (GIB) under the research programme on Status Survey of *Ardeotis*

nigriceps (Vigors, 1831) in Grasslands of Rajasthan from 10th – 21st May, 2015. Six major grasslands of Jaisalmer district including Desert National Park Sanctuary (DNP) were surveyed. The GIB was sighted only at two localities. Apart from status survey of GIB in

the Jaisalmer district of Rajasthan, 7 species of reptiles, 69 species of birds and 11 species of mammals were recorded and identified in the field. Dr. H. S. Banyal, Sci. C undertook a faunal survey under the programme, Exploration of Ichthyo-faunal Diversity in the Escape Reservoirs of Indira Gandhi Nahar Pariyojna (IGNP) Canal in the Bikaner and Jaisalmer districts of the Thar Desert, Rajasthan from 22nd to 31st May, 2015. 18 major localities were surveyed under the said programme and collected 36 examples of gastropods, 360 examples of fishes & 1 example of Amphibia. Dr. Sanjeev Kumar, Sci. D & Officer-in-charge attended Rajasthan State Wildlife Board meeting convened by Chief Minister of Rajasthan at Jaipur on 8th

May, 2015. He also attended the celebrations of the International Biodiversity Day 2015 organized by Botanical Survey of India (BSI), Jodhpur on 22nd May, 2015 as Chief Guest and delivered an invited lecture on the Importance of Biodiversity Day. Dr. H. S. Banyal, also attended the aforesaid function as a distinguished guest.



Dr. Sanjeev Kumar, delivering invited lecture on importance of Biodiversity Day



Ardeotis nigriceps (Vigors, 1831) in the grasslands of Jaisalmer, Rajasthan



Dendrocitta vagabunda (Latham, 1790) in Jaisalmer, Rajasthan

CENTRAL ZONE REGIONAL CENTRE, JABALPUR

During the month, the scientists of the Centre identified and registered 33 species of Lepidoptera (butterflies and moths), 10 species of Odonata, 6 species of Hemiptera and 1 species of small mammals (Rodentia) from Gwalior, Narsingpur and Jabalpur districts of Madhya Pradesh. Identification and advisory service were rendered to Dr. Varsha Zade, Associate Professor, Department of Zoology, Govt. Vidarbha Institute of

Science & Humanities, Amravati, for identification of bones samples isolated from pellets of Barn owl collected from Melghat Tiger Reserve, Amravati, Maharashtra. Shri Sandeep Kushwaha, Senior Zoological Assistant attended National Conference on Recent Advances in Zoology, organized by the School of Studies in Zoology, Jiwaji University, Gwalior w.e.f. 3rd -4th May, 2015.

MARINE BIOLOGY REGIONAL CENTRE, CHENNAI

A manuscript 'Faunal diversity in the mangroves of Bhitarkanika, Orissa' was submitted for publication in Records of Zoological Survey of India. A total of 290 species, under 14 faunal groups, have been reported from this ecosystem. Shri P. Padmanaban, Assistant Zoologist submitted his PhD thesis entitled, "Studies on the Sea Snakes of Tamil Nadu Coastal waters' to Madras University entitled'. The study aimed to understand the seasonal abundance and

food preference of Sea snakes occurring in the coast of Chennai and Gulf of Mannar Biosphere Reserve. The findings of this study corroborated with the larger global pattern wherein large marine species high in the trophic food chain are the first to disappear from areas subjected to sustained fishing pressure, thereby indicating the threat to these group of reptiles in Indian waters as well.



Crocodylus porosus Schneider, 1801



Hydrophis cyanocinctus Daudin, 1803

GANGETIC PLAINS REGIONAL CENTRE, PATNA

During the month 14 species of Lepidoptera were identified. Dr Navneet Singh, Sci. D delivered an invited lecture on 'Entomology and its career prospects' and Dr. Gopal Sharma, Sci. D delivered an invited lecture on 'Biodiversity Conservation' at the Department of Zoology, B.R.A. Bihar University, Muzaffarpur, Bihar on May 9, 2015. Dr. Gopal Sharma, also attended a meeting with PCCF, Govt. of Bihar, for inputs in formulation of Kavar Lake Management Plan by The Wetland International, New Delhi on 14th May 2015 at Sanjay Gandhi Biological Park, Patna. On 16th May 2015, he delivered a lecture on Global Warming and Impact on Biodiversity in the Shri Arvind Mahila Mahavidyalay, Magadh University, Kazipur, Patna. Dr. Gopal Sharma, Sci. D attended a consultation meeting for project on DPR Preparation of

"Forestry Interventions for Ganga" on 19th to 20th May, 2015 at ARANYA Bhawan, Bailey Road, Patna. GPRC, ZSI, Patna celebrated Biodiversity Day on 22nd May, 2015 where more than 80 M.Sc, M.Phil, and Ph.D students were sensitized about the role of Biodiversity and its conservation. Dr. Sharma, also delivered a lecture on wetlands of Bihar.

Publications

- Kirti, J.S., Singh, H. & Singh, N. (2014). Redescription of the genus *Cyclodes* Guénee (Noctuidae: Lepidoptera). *North Bengal University Journal of Animal Sciences* 8: 5-7
- Kirti, J.S., Singh, N. & Singh, H. (2014) *Lophoptera hypenistis* (Hampson) (Lepidoptera: Euteliidae) from Mizoram, a new record to India. *National Journal of Life Sciences* 11 (1): 57-58.

WESTERN REGIONAL CENTRE, PUNE

During the month 1 species of Collembola, 18 species of Pisces, 7 species of Araneae, 22 species of Decapoda (Marine Crabs), 1 species of Lepidoptera and 11 species of Odonata were identified. Identification and Advisory services rendered for Araneae, Hemiptera, Odonata, Coleoptera, Orthoptera and Lepidoptera to different organizations. Advisory services were also provided to Maharashtra State Biodiversity Board for

various projects. A skin of Leopard (*Panthera pardus*) brought by the Forest Department, Badlapur, Maharashtra was identified. Dr. S.K. Pati, Sr. Zoological Assistant described a new taxa of fresh water crab *Spiralothelphusa gibberosa* Pati & Sudha Devi, 2015 (Arthropoda: Crustacea: Malacostraca: Decapoda: Brachyura: Gecarcinucidae) from Kerala, India. Another species of crab *Spiralothelphusa wuellerstorfi* (Heller, 1862)

(Arthropoda: Crustacea: Malacostraca: Decapoda: Brachyura: Gecarcinucidae) was reported as a new record from Maharashtra by Dr. S.K. Pati.

Publications

- Bano, Ruquaeya 2015. Diversity of Collembola (Hexapoda: Collembola) of Phansad Wildlife Sanctuary, Raigad, Maharashtra: A preliminary report. *Species*, 13 (39): 26-28.
- Pati, S.K. and Sudha Devi, A.R. 2015. *Spiralothelphusa gibberosa*, a new freshwater crab (Brachyura: Gecarcinucidae) from

Thrissur district, Kerala, India. *Zootaxa*, 3963 (3): 416–424.



Spiralothelphusa gibberosa Pati & Sudha Devi, 2015

NORTH EASTERN REGIONAL CENTRE, SHILLONG

During the month 13 specimens of fishes were identified into 6 species and one species of Chiroptera from nine specimens. Also identified one species of Coleoptera. One species of fish was identified Dr. B. Massar, St. Anthony's College, Shillong. Ten students of Bajali College, Assam, and about 20 students of St. Edmund's College Shillong visited the Centre. The students were briefed about the different procedures of collections, preservation and maintenance of zoological specimens. The Centre observed the International Day for Biological Diversity on

22nd May and about 130 students from the department of Environmental Science, St. Edmund's College Shillong participated in the programme.

Publications

- Ananda Ram Boro and UttamSaikia, 2015. The Horsfield's Myotis, *Myotis horsfieldii* (Temminck, 1840) (Chiroptera: Vespertilionidae): an addition to the bat fauna of Assam, Small Mammal Mail vol.1(1): 13-14, 2015.



A longhorn beetle *Pseudonemorphus versteegi* (Ritsema).



During the observation of International Day for Biological Diversity



Students and teachers of St. Edmund's College, Shillong during their visit to the centre



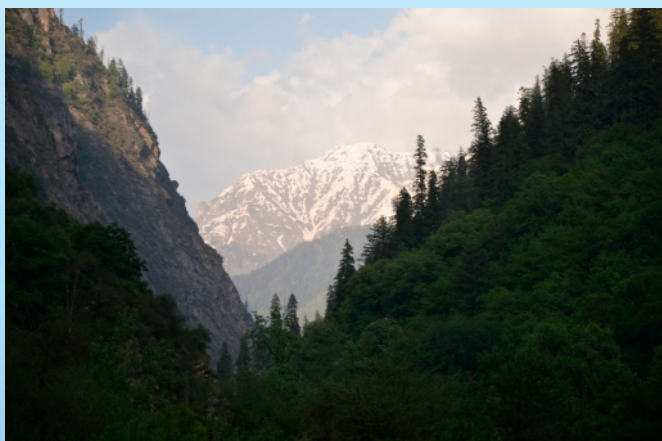
Students of Bajali College, Assam during their visit to the Centre

HIGH ALTITUDE REGIONAL CENTRE, SOLAN

The Faunistic Survey of the Sainj Wildlife Sanctuary, district Kullu (at 1400-2500 msl by trekking of about 60 kms), was conducted from 19th to 26th May 2015. The faunistic identification from the Centre includes 5 species of butterflies (out of 31 examples), 3 species of Orthoptera (out of 5 examples) and 1 species of earthworm (out of 24 examples) from the Cold Desert of Spiti Valley, district

Lahaul and Spiti, (HP); Two species of butterflies (out of 15 examples) and 3 species of Pisces (out of 06 examples) were identified from Gobind Sagar Wetland. The Officer-in-Charge attended Wildlife Board meeting (Himachal Pradesh) on 8th May, 2015 as member and representative of Director, ZSI, with Honorable Chief Minister Sh. Virbhadra Singh and Forest Minister Sh. Thakur Singh

Bharmouri. One of the scientists at the Centre provided information/literature of Simbalbara butterflies species and nectar food plant to Chief Conservator of Forest, Sh. P. L. Chauhan, Shimla and also rendered technical assistance for the developing Butterfly Park in Simbalbara Wildlife Sanctuary. The Officer-in-Charge gave a presentation to Wildlife officials on two new programmes of the Centre viz. Sainj Wildlife Sanctuary and Sangla Valley to take the permission to conduct the surveys in the areas on 13th May, 2015 at Wildlife Office, Shimla. One Scientist gave the advisory service and hands-on guidance related to taxonomy of earthworms to Dr. Shweta Yadav, Associate Professor, Dr. HS Gaur Central University, Sagar (MP) and identification of 20 lots of earthworms was also confirmed. Dr. Avatar Kaur, the Officer-in-charge guided the work of Ms. Anjoo Dhar, Zoological Assistant on Trichoptera and Neuroptera for taxonomic studies and Mr. Akhil Nayr, Zoological Assistant on Microlepidoptera and on collection and preservation of insects and maintenance of insect collections.



Landscape of Sainj Wildlife Sanctuary

Publications

- Prakash C. Pathania, Avtar Kaur Sidhu and Kyu-Tek Park (2015). Checklist of Fauna of India — Checklist of family Lecithoceridae (Microlepidoptera: Gelechioidea) from India (Part-III). 1-25pp.online publication. <http://zsi.gov.in/WriteReadData/userfiles/file/Checklist/Checklist%20of%20family%20Lecithoceridae.pdf>
- Kumar Anil and Paliwal Rahul 2015. Feral dogs of Spiti Valley, Himachal Pradesh: an emerging threat for wildlife and human life. *Current Science*, 108 (10): 1799-1800.



A pair of males of *Papilio polyctor* puddling in Sainj



Survey team trekking to Shakti in Sainj WLS

SOUTHERN REGIONAL CENTRE, CHENNAI

A survey party under the leadership of Dr. S. Prabakaran, Sci.D proceeded to Kalakkad Mundenthurai Tiger Reserve on 30th May. Dr. Jayasree Thilak, Sci. D submitted the final manuscript of the project entitled "Taxonomic studies on the fresh water Ostracoda from Villupuram, Trichy, Thiruvannamalai, Nilgiri and Chennai districts of Tamil Nadu". She identified, 186 specimens of Pisces belonging to 13 species, 12 genera, 4 orders under 8 families from the 2013 collections' of state fauna of Andhra Pradesh. She also rendered identification services to Miss. Dayana, research scholar, Department of Biochemistry, Bharathi Women's College, Chennai on the fish specimen *Carassius auratus auratus* (Linnaeus, 1758). Dr. R. Babu, Sci. D identified 29 specimens of odonates belonging to 11

species, 9 genera, under 2 families from the specimens collected from Trichy and Villupuram districts of Tamil Nadu. Dr. R. Aengals, Sci. D, identified 22 amphibian specimens into 3 species under 3 genera belonging to 2 families from the collections of Andhra Pradesh State. Shri. D. Prabakar Sci. B identified 21 specimens of Acridoidea and Grylloidea (Grasshoppers and Crickets) as 11 species under 11 genera belonging to 7 subfamilies and 4 families collected from the faunistic survey to the Western Ghats of Tamil Nadu. Dr. V. M. Sathish Kumar, Assistant Zoologist isolated DNA and thereafter PCR was done for the DNA extracts of the following species *Uropeltis* sp., *Rhamphotyphlops braminus* (Daudin, 1803) and *Atrietium chistosum* (Daudin, 1803).