


# *ZSI e-NEWS*

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*ZSI in the 97<sup>th</sup> year of Service to the Nation  
(1916 to 2012)*



# *ZSI e-NEWS*

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## Headquarters, Kolkata

A field survey was carried out in Teesta River basin in North Bengal, to document the fish faunal diversity and a local survey was conducted in the fish landing center at Canning to collect the representative fauna.

During the month, 3 species of Protozoa, 1 species of Platyhelminthes, 3 species of Collembola, 31 species of Hemiptera, 11 species of Hymenoptera, 8 species of Odonata, 4 species of Orthoptera, 11 species of Coleoptera, 17 species of Isoptera, 21 species of Arachnida, 3 species of Crustacea, 48 species of Mollusca, 43 species of fishes, 8 species of Amphibia and 1 species of mammal from the States of Andhra Pradesh, Assam, Arunachal Pradesh, Chhattisgarh, Delhi, Gujarat, Himachal Pradesh, Jharkhand, Jammu & Kashmir, Karnataka, Kerala, Maharashtra, Manipur, Sikkim, Tripura, Meghalaya, Mizoram, Nagaland, Odisha, Pondicherry, Uttarakhand, Uttar Pradesh, West Bengal, Andaman & Nicobar Islands and Tamil Nadu (Kanyakumari Wild Life Sanctuary & South Eastern Ghats) were identified by the scientists of Headquarters.

Two new species of fishes belonging to the genera *Garra* and *Scolopsis* and a new species of Hymenoptera (Pteromalidae) were described. The Assam Painted Frog, *Kaloula assamensis* was recorded for the first time from Bihar. Besides, the Bigscale Jawfish, *Opisthognathus macrolepis* Peters (Perciformes: Opisthognathidae) and *Melaenus piger* (Fabricus) (Coleoptera: Carabidae) were recorded for the first time from the East Coast of India and the Indian State of Uttar Pradesh respectively.

During the month, 4 research papers were published, 4 accepted and 6 communicated.

Identification and advisory services were rendered on 13 lots of specimens, received from different Institutions and Organizations. Besides, identification and advisory services

were rendered to students, research scholars and teachers from various colleges in Kolkata and from Burdwan University and Assam University, on various faunal groups. Literature facilities were provided to Dr S. K. Mandal and Dr Akhlaq Husain, retired scientists of ZSI and to Dr Rajeev Gupta, Associate Professor, Department of Zoology, Jayanarayan Vyas University, Jodhpur, Rajasthan.

Dr. Annemarie Ohler, Curator of Vertebrates at the National Museum of Natural History (Museum Nationale de Histoire Naturelle), Paris, France, visited the Amphibia Section from 5<sup>th</sup>-7<sup>th</sup> March to study the megophryid frog specimens present in the National Zoological Collection. Postgraduate students from Indira Gandhi Krishivishwavidyalaya, Raipur, Chattisgarh, visited the Headquarters on 23<sup>rd</sup> March to learn the Taxonomy of fishes. Dr. Mousumi Roy, Asst. Professor, Kishore Bharati Bhagini Nivedita College, Kolkata visited different Divisions / Sections along with a batch of 21 students on 23<sup>rd</sup> March and they were provided information on collection and preservation techniques of animals. Four students of Charuchandra College, Lake Road, Kolkata, led by Dr. N. K. Jana, Head of the Department of Zoology, Charuchandra College, visited the Isoptera and Apterygota Sections and they were provided scientific guidance and laboratory facilities. A Research Scholar from Dept. of Zoology, University of Jammu, J&K, visited the Coleoptera Section for scientific guidance.

Shri S. S. Mishra, Scientist-B of Marine Fish Section attended a Seminar on "Recent Advances in Zoology and its application in Human Welfare", organized by Surendranath College, Kolkata on 4<sup>th</sup> March and Shri Mishra delivered a lecture on 'Fish diversity of West Bengal with special reference to endemic and threatened fishes'.



Shri Sankar Talukdar, Scientist-B, visited Cutting's Jheel for population count of the visiting birds to evaluate the area that is proposed to be declared as a conservation area for birds by the Govt. authorities.

Dr. S. Sheela, Scientist-C delivered an invited lecture on "Taxonomy and Biodiversity conservation" and Dr. A. Chattopadhyay, Asst. Zoologist delivered an invited lecture on Global Warming at a UGC sponsored state level seminar on "Advancement of Biological Science Towards Sustainable Development" at Behrampore Girls' college, Murshidabad, West Bengal on 30<sup>th</sup> March.

Dr. K. A. Subramanian, Scientist-C participated as a resource person in the "National Level Hands-on Training Workshop on Principles and Practices of Animal Taxonomy with special reference to Insects", organized by the Western Ghat Regional Centre, ZSI, Calicut from 27<sup>th</sup> February to 3<sup>rd</sup> March, 2012. Two research scholars, Miss. Jhikmik Das Gupta and Miss. Srimoi Basu attended the above said Workshop as Trainees. Dr. K. A. Subramanian, Scientist-C as Member Secretary, conducted the North Zone PAC meeting at HARC, Solan on 24<sup>th</sup> March, 2012.

Dr. Animesh Bal, Scientist-F, attended the valedictory function of the First State Government Official's Training on 1<sup>st</sup> March at MARC, ZSI, Digha and delivered the Presidential address and as well conducted the panel discussion of the Training Programme.

Dr. K. Venkataraman, Director, ZSI, inaugurated the "National Level Hands-on Training Workshop on Principles and Practices of Animal Taxonomy with Special Reference to Insects", organized by the Western Ghat Regional Centre, ZSI, Calicut from 27<sup>th</sup> to 3<sup>rd</sup> March, 2012 and delivered a keynote address on "Importance of Taxonomy in Biodiversity Conservation". Dr. K. Venkataraman also attended a Seminar on "Recent Advances in Zoology and its application in Human Welfare", organized by the Surendranath

College, Kolkata on 4<sup>th</sup> March and delivered a Keynote address. Further, he attended a seminar on "Marine Fisheries in West Bengal Problems and Prospects", organized by the Jadavpur University, Kolkata on 14<sup>th</sup> March, the National Workshop on "ICZM Planning", organized by State Project Management Unit (SPMU), ICZM Project-Odisha in collaboration with National Centre for Sustainable Coastal Management (NCSCM), Ministry of Environment & Forests, Government of India on 16<sup>th</sup> and 17<sup>th</sup> March at Bhubaneswar and delivered a lecture on "Coastal and Marine Ecosystem".

Dr. K. Venkataraman, Director, ZSI attended the meetings with the Secretary, MoEF on 21<sup>st</sup> March, with the Chairman, NBA and Additional Secretary, MoEF on 22<sup>nd</sup> March and the Departmental Council Meeting on 23<sup>rd</sup> March, at New Delhi and as well the North Zone PAC Meeting at the High Altitude Regional Centre, ZSI, Solan on 24<sup>th</sup> and 25<sup>th</sup> March, 2012.

Dr. Nandita Chatterjee, I.A.S., Additional Secretary, MoEF, Govt. of India, visited the ZSI Headquarters on 5<sup>th</sup> and 6<sup>th</sup> of March, 2012; she visited different Divisions / Sections and held review meetings.

#### **Publications:**

1. Venkataraman, K. 2012. Coastal and Marine Diversity of India. In: "*National Workshop on ICZM Planning*" State Project Management Unit (SPMU), ICZM Project-Odisha, Bhubaneswar, pp. 91-101.
2. Chandra, K., Khan, S., Gupta, D. and Singh, S. P. 2011. Additional Records of Scarab fauna (Coleoptera: Scarabaeidae) of Pachmarhi Biosphere Reserve, Madhya Pradesh, India. *National Journal of Life Sciences*, 8 (1): 6770.
3. Chandra, K., Kushwaha, S., Gupta, D. and Singh, S.P. 2011. Record of some insects Associated with *Calotropis procera* (Asclepiaceae) in Jabalpur district (M.P.),



India. *National Journal of Life Sciences*, 8(1): 131134.

4. Narendran, T. C., Girish Kumar, P. and Lakshmi Devi Menon (2011). A review of



Dr. Nandita Chatterjee, IAS, Additional Secretary, MoEF, Govt. of India being Welcomed and felicitated by the Staff of ZSI, Kolkata



Dr. Nandita Chatterjee, IAS, Additional Secretary, MoEF, Govt. of India addressing the staff of ZSI



Dr. Nandita Chatterjee, IAS, Additional Secretary, MoEF, Govt. of India, visiting the Divisions/Sections of ZSI



Dr. Annemarie Ohler, National Museum of Natural History, Paris, France with Dr. Nandita Chatterjee, IAS, Additional Secretary, MoEF, Govt. of India, on her visit to ZSI, Kolkata



*Coleps hirtus* (Muller)*Danio dangila* (Hamilton)*Parambassis lala* (Hamilton)*Botia lohachata* Chaudhuri

## Marine Biology Regional Centre, Chennai

During the month, 8 species of sea grass associated Foraminifera, 2 species of marine sponges, 1 species of Ostrocod, 4 species of nematodes, 11 species of Mollusca and 2 species of fishes were identified out of the material collected from Palkbay and Gulf of Mannar Biosphere Reserve. Twenty eight identified species were digitized and metadata compiled. Dr. C. Venkatraman, Scientist-C & Officer-in-Charge attended the Institutional Animal Ethics Committee meeting at Sri Ramachandra University, as an External Scientist. He also identified the confiscated shell items for the

Station House Officer, New Ashok Nagar and Preet Vihar Police Stations, Delhi. Dr. Rajkumar Rajan, Scientist-C attended the Wildlife advisory board meeting for the Union Territory of Lakshadweep at Kavaratti, Lakshadweep and provided information on the red coral *Corallium rubrum*, to the Assistant Manager-Quality Control, SKM Siddha and Ayurvedha Company (India), Erode, Tamil Nadu. Four manuscripts were submitted for publication. One thousand one hundred and ten students and tourists visited the marine aquarium and museum during the month.





Cushion sea star

*Turricula javana* (Linnaeus, 1767)

### Southern Regional Centre, Chennai

Identifications for the month include the following groups from Southern & Middle Eastern Ghats viz. Rotifera: 12 spp., Cladocera: 23 spp., freshwater testate amoebae: 19 spp., gastropods & bivalves: 9 spp. and reptiles: 6 spp. Dr. K. Ilango, Scientist-D & Officer-in-Charge attended the National Seminar on Forest Health Management, organized by the Institute of Forest Genetics & Tree Breeding, Coimbatore on 20<sup>th</sup> and 21<sup>st</sup> of the month and presented an invited paper on 'Insect pests of human diseases in forest ecosystem' and chaired a session on insect pests, diseases, invasives and forest health. Dr. Ilango as a member attended the meeting of Board of Trustees of the Chennai Snake Park on 24<sup>th</sup> March. He has been appointed by the Entomological Society of India as the Editor of the journal, *HEXAPODA*. Two manuscripts for ENVIS newsletter of ZSI were submitted and one research manuscript reviewed by the scientists of the Centre. Dr R. Venkitesan,

Scientist-C participated in the International workshop on fish Taxonomy held at PG & Research Department of Zoology, Govt. Arts College, Kumbakonam from 21<sup>st</sup>-23<sup>rd</sup> March. Dr. R. Venkitesan completed the revalidation of scientific names of molluscan specimens present in the Egmore museum. Dr. Jayasree Thilak, Scientist-C, conducted a tour to Jabalpur, M. P., from 25<sup>th</sup> February-9<sup>th</sup> March for the identification of the unidentified collections of fishes, Neuroptera and Zooplankton of Veerangana Durgavati Wildlife Sanctuary, M.P. and Singhori Wildlife Sancturay, M. P. Dr. V. M. Sathish Kumar, Sr. Zool. Asst. attended the training programme on DNA Barcoding at IARI, New Delhi from 27<sup>th</sup> February-2<sup>nd</sup> March. He also briefed the DNA barcoding techniques to Prof. K.S. Jameela Beevi, Principal (Retd.) Maharajas College, Eranakulam, Kerala and to Shri. S. Kumaralingam, Senior Research Fellow, Zoological Survey of India, Andaman and Nicobar Regional Centre on 22<sup>nd</sup> March 2012.

### Desert Regional Centre, Jodhpur

A field survey to explore the Vertebrate diversity of Chambal River in Rajasthan was conducted from 3<sup>rd</sup>-11<sup>th</sup> March, 2012. Eleven species of reptiles, 137 species of Aves and 16 species of mammals were identified and recorded. Besides, 8 species of fishes from River Chambal, Rajasthan, 1 species of fish from

Kachchh Biosphere Reserve, Gujarat and 4 species of Odonata from Sita Mata Wildlife Sanctuary, Rajasthan were registered. The final report on Taxonomic studies of aquatic nematodes of lakes of Udaipur, Rajasthan and the report on Studies on Odonata and Lepidoptera of foothills of Aravalli Range,



Rajasthan were submitted. Dr. Padma Bohra, Scientist-D, Dr. Gaurav Sharma, Scientist-C, Dr. Sanjeev Kumar, Scientist-C and Dr. H. S. Banyal, Scientist-C attended the XXIII National Symposium on Chronobiology and Seminar on Diversity and Physiology of Desert Fauna from 1<sup>st</sup>-3<sup>rd</sup> March, organized by the JNV University, Jodhpur. Dr. Sanjeev Kumar delivered an invited lecture on Diversity and Status of Raptors of the Great Indian Desert in the symposium and also acted as Co-chairman in the Technical Session: Physiology and Ecotoxicology, on 2<sup>nd</sup> March, 2012. Dr. H. S. Banyal presented a paper on Fisheries resource and potential of Rana Pratap Sagar Reservoir on Chambal River, Rajasthan-A review, in the symposium. Dr. Sanjeev Kumar attended and presented a research paper in the NAIP All India Workshop: Utilization of *Prosopis juliflora*: Challenges and Opportunities held from 12<sup>th</sup>-13<sup>th</sup> March, 2012, organized by NAIP, CAZRI (ICAR), Jodhpur. Dr. Gaurav Sharma delivered lectures on the Faunal Diversity of India and efforts on conservation of biodiversity to 53

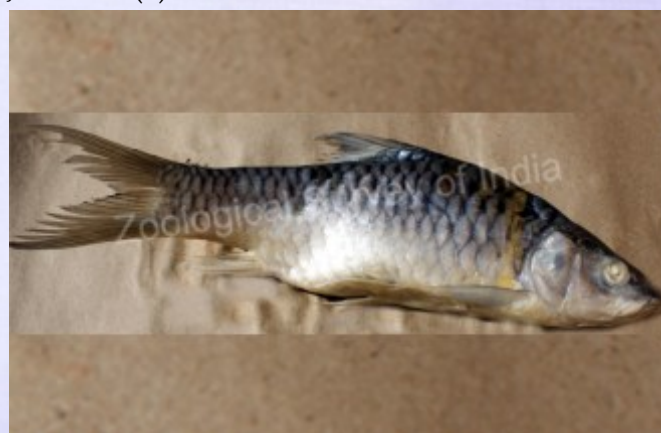
students and 4 teachers of GGMS, Kalibari on 1<sup>st</sup> March, on the importance of Natural History Museum and on conservation of biodiversity to 62 students and 5 teachers of GSSS Aru Nadi on 13<sup>th</sup> March and also on Faunal Diversity of Rajasthan and Gujarat as well as on the importance of natural history museum, to 85 students and 2 teachers of GMS Shikarpura on 20<sup>th</sup> March. Dr. Sanjeev Kumar delivered two lectures on Biodiversity in the Capacity Building Training programme, organized by the Office of the Dy. Conservator of Forest, Desert Forest Training Centre, Jodhpur on 12<sup>th</sup> and 19<sup>th</sup> March. Dr. Sanjeev Kumar attended the Programme Advisory Committee (PAC) Meeting of North Zone as member of PAC North Zone, held on 24<sup>th</sup> March, 2012 at HARC, ZSI, Solan, Himachal Pradesh.

#### Publication:

Sharma, G. 2011. Association of Ants and honeydew producing sucking pests in Bangalore Provenance of Sandal (*Santalum album* Linn.). *Biological Forum- An International Journal*.3 (2):62-64.



*Notopterus notopterus*



*Tor khudree*

### High Altitude Regional Centre, Solan

During the month, 4 species of Orthoptera from Kalatop-Khajjiar Wildlife Sanctuary and 3 species of Pisces (Collection received from NRC/ZSI, Dehradun) were identified. Two research papers were published. The Centre participated and set an exhibition stall in *Bharat Nirman* Programme, Govt. of India,

Information Division, Shimla, from March, 19<sup>th</sup>-21<sup>st</sup>, organized at Kandaghat, Solan. Local farmers, School children and General public visited the stall and gained knowledge on the fauna of Himachal Pradesh.

The Programme Advisory Committee meeting (North Zone), Zoological Survey of India, was



conducted at Solan on 24<sup>th</sup> March. Dr. K. Venkataraman, Director, ZSI, presided over the meeting and Prof. Mohammad Hayat, Aligarh Muslim University, Aligarh, chaired the meeting. Dr. K. Venkataraman, Director, ZSI and C. Radhakrishnan, Additional Director, WGRC/ZSI, Calicut inspected the Centre on 25<sup>th</sup> March.

#### **Publications:**

1. Sidhu, Avtar Kaur, Kaur, Manbeer, Rose, H.S. 2011. Life History of the Indian Tortoiseshell, *Aglaia cashmirensis* Kollar (Lepidoptera: Papilionoidea: Nymphalidae). *Ann. Entomol.*, 29(2): 47-51

2. Thakur, M. L. & Paliwal Rahul. 2012. Avian diversity of Chandigarh (UT). *Int. J. advanced biol. Res.*, 2(1): 103-114.



During the Programme Advisory Committee meeting (North Zone) of ZSI, held at Solan

### **Marine Aquarium cum Regional Centre, Digha**

The Centre organized a Training Programme on Integrated Coastal Zone Management for State Government Officials under the capacity building programme of the World Bank sponsored project from 24<sup>th</sup> February to 1<sup>st</sup> March, 2012.

Among the aquarium exhibits, over 100 examples of live marine ornamental exhibits were collected for exhibition in the aquarium galleries. The major attractions among the aquarium exhibits during the month were Whitespotted whipray *Hymantura gerrardi*, conger eel (*Muraenesox cinereus*) and Spiny lobster *Panulirus ornatus*. The aquarium received an average of 280 tourists per day, during the month. Scientists of the Centre identified 19 species of fishes and 20 species of mollusks during the month. Among the fish species identified, *Heniochus singularis* Smith & Redcliffe, 1911 and *Brachysomophis cirrocheilos* (Bleeker, 1857) turned out to be new records from the coastal waters of West Bengal. Dr. Anil Mohapatra, Scientist-C attended the First Biennial International Congress on Urban Green Spaces, 2012 held at New Delhi from 5<sup>th</sup> - 7<sup>th</sup> of March. Dr. Prasanna Yennawar, Scientist-C and Officer-in-Charge participated in the 2<sup>nd</sup> Audit Committee meeting for ICZM Project in

West Bengal at the Institute of Environmental Studies and Wetland Management, Kolkata on 20<sup>th</sup> March, 2012.



*Brachysomophis cirrocheilos*



*Heniochus singularis*



### Western Regional Centre, Pune

A field survey was conducted from 14<sup>th</sup>-22<sup>nd</sup> March, 2012 in Phansad Wildlife Sanctuary and surrounding areas district Raigad, Maharashtra. During the month, 4 species of freshwater crabs, 1 species of Collembola, 4 species of aquatic Coleoptera, 20 species of Orthoptera, 5 species of Hymenoptera, 4 species of Odonata and 5 species of Lepidoptera were identified. The insect remains in pellets of spotted owl received from Garware College,

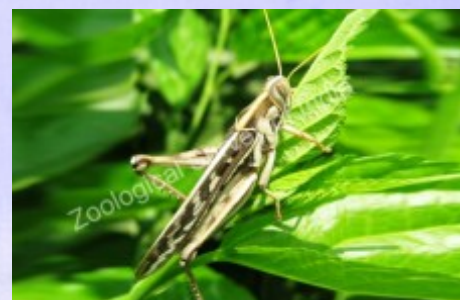
Pune, a query on Lepidoptera received from Jalgaon, fish specimens received from Dr. Ramakrishna, More College, Pune for identification were identified and identification service rendered. Dr. R. M. Sharma, Scientist-D & Officer-in-Charge delivered an invited lecture on "Insect Diversity and Conservation Issues" at the National Seminar on "Biodiversity & Conservation" at Yashwantrao Mohite College of Science, Pune on 14<sup>th</sup> March.



*Pseudibis papillosa* (Temminck)



*Lethocerus indicus* (Lepeletier & Serville)



*Cyrtacanthacris tatarica* (Linnaeus)

### Estuarine Biology Regional Centre, Gopalpur-on-Sea

A field survey in Subadhra Estuary, Odisha was conducted for collection of brackish water ornamental fishes. 10 species of ornamental fishes were collected and identified. From the collection of the Pennar Estuary, Andhra Pradesh, 5 species of molluscs were also identified. Seven species belonging to Annularis and Myzomyia group of Neocellia series of mosquitoes collected, were processed for gel-electrophoresis. Genomic DNA was extracted from single individual adult mosquitoes. Dr. Shantabala Devi Gurumayum, Scientist-C attended a Workshop on Geometric Morphometrics organized by CEMDE, University of Delhi, sponsored by MoEF, Govt

of India from 20<sup>th</sup>-30<sup>th</sup> March 2012 at New Delhi. A research paper was communicated for publication.



*Pterotolithus maculatus* (Cuvier)

### Central Zone Regional Centre, Jabalpur

During the month, 16 species of Coleoptera, 4 species of Hemiptera, 7 species of moths, 11 species of butterflies, 8 species of Araneae, 12 species of fishes, 10 species of Protozoa, 11 species of Rotifera, 13 species of Cladocera and

4 species of Neuroptera, were identified and registered from Singhori and Veerangana Durgawati Wildlife Sanctuaries, Madhya Pradesh. Dr. S. Sambath, Scientist-C & Officer-in-Charge attended the 38<sup>th</sup> Research Advisory



Committee (RAC) of the State Forest Research Institute, Jabalpur on 6<sup>th</sup> March. The Scientists and staff of the Regional Centre actively participated in the Scientific Mela at Jabalpur, organized by the Madhya Pradesh Science and Technology, Regional Centre, Jabalpur from 17<sup>th</sup>-19<sup>th</sup> March. Two research papers were published and four research papers were communicated during the month.

#### Publications:

1. Kailash Chandra, and Devanshu Gupta, 2012. New Distributional Record of Five Species of *Onthophagus* (Coleoptera: Scarabaeidae: Scarabaeinae) from Central

India. *Scholarly Journal of Agricultural Science*, Vol. 2(1), pp. 8-12. ([www.scholarlyjournals.com](http://www.scholarlyjournals.com))

2. Talmale, S. S. 2012. Dragonfly & Damselfly (Insecta: Odonata) diversity of Veerangana Durgavati Wildlife Sanctuary, Damoh, Madhya Pradesh. *Journal of Science information Special Issue-3*, on UGC sponsored National Conference on Current Status of Fresh Water Aquatic Biology and Wetland Conservation held at Anand Niketan College, Anandwan-Warora, Dist. Chandrapur, Maharashtra on 2<sup>nd</sup> Feb. 2012 : 12-16pp.



Stall of CZRC/ZSI at the Scientific Mela at Jabalpur, organized by the M. P. Science and Technology Reg. Centre

### Freshwater Biology Regional Centre, Hyderabad

Field surveys were conducted in raw water reservoirs viz. Himayat Sagar, Ameenpur irrigation tank, Bandakum ponds and Patancheruvu of Hyderabad for studying the seasonal variations on faunal composition and

the physicochemical factors. During the survey, zooplankton samples and macrofaunal groups were collected. Three species of Freshwater fishes, 3 species of rotifers and 2 species of Cladocera were identified and registered.



*Catla catla* (Hamilton)



*Labeo rohita* (Hamilton)



Three species of fishes, 8 species of Rotifera and Cladocera were digitized. Prof. Y. Ranga Reddy, Emeritus Scientist, Acharya Nagarjuna University, Guntur, Andhra Pradesh was provided access to National zoological

collections (Zooplankton holdings from different lakes in Andhra Pradesh), for his studies. Two research scholars and 2 M. Sc., students of CCMB/Lacones, Hyderabad visited the DNA laboratory of the Centre.

### Gangetic Plains Regional Centre, Patna

A field survey tour at river Damodar in Jharkhand was conducted and representative fauna collected. Dr. Gopal Sharma, Scientist-C, and Dr. Navneet Singh, Scientist-C attended a Developmental Meet 2012 organized by CUB, Patna and Dr. Gopal Sharma presented a poster on "Impact of rising Urban Pressure on Ecology of the River Ganga at Patna, India". The

digitization work of 11 species of the family Noctuidae (Lepidoptera) has been completed. The Hindi workshop was conducted on 28<sup>th</sup> March 2012. Dr. R. K Varshney, former Addl. Director of ZSI and 19 school students and 6 University students visited the Centre during the month.

### Northern Regional Centre, Dehra Dun

Two intensive faunal surveys were undertaken under the Programme "Fauna of Dehradun District" and representative fauna belonging to 13 faunal groups collected, besides collecting 5 exs. of helminth parasites from amphibia and soil nematodes from soil samples. Digitization of 5 species of Pisces has been completed and metadata entered in the Vertebrate database, while metadata of 5 Nematodes and 20 Butterflies have been made in the Invertebrate database. Three research papers were accepted for publication. Shri P. T. Bhutia, Scientist-F & Officer-in-Charge as resource person, attended the workshop on 'The interaction between the Tribals of Uttarakhand and the Scientist of

Anthropological Survey of India (ASI), Dehradun', held at ASI, Dehradun from 18<sup>th</sup>-20<sup>th</sup> March. He also attended the inaugural function of the training program under the AICOPTAX organized by the BSI, Dehradun on 19<sup>th</sup> March. He also attended the PAC North Zone meeting on 24<sup>th</sup> March held at HARC, ZSI, Solan, as a committee member. Dr. Biju S. Das, Delhi University, visited the Centre along with a Ph. D. Scholar for studying the amphibian collection present at the Centre. Dr. M. Balaji, Scientist, Institute of Wood Science & Technology, Vishakhapatnam and 10 students visited the museum of NRC.

### Andaman and Nicobar Regional Centre, Port Blair

Field surveys were conducted in the marine and terrestrial ecosystems of Diglipur, Saddle Peak, Lamia Bay in North Andaman; and Cinque Island and Rutland Island in South Andaman during 2<sup>nd</sup>-7<sup>th</sup> and 23<sup>rd</sup>-24<sup>th</sup> March 2012. As a result of the field studies, 171 species of scleractinian corals, 6 species of soft corals, 40 species of echinoderms, 25 species of opisthobranchs, 65 species of gastropods, 6 species of brachyuran crabs and 11 species of

fishes from marine habitat; and 23 species of butterflies, 1 species of frogs, 6 species of reptiles, 41 species of Aves from terrestrial habitat; and 7 species of fishes from freshwater streams have been identified. Among them, 5 species of Opisthobranchs *Chromodoris decora* (Pease, 1860), *Cuthona sibogae* (Bergh, 1905), *Noumea hongkongensis* Rudman, 1990, *Okenia liklik* Gosliner, 2004 and *Siphopteron brunneomarginatus* Carlson and Hoff, 1974



turned out to be new records to India. A total of 141 specimens including 51 specimens of corals, 2 specimens of octo-corals, 68 specimens of molluscs, and 20 specimens of butterflies have been registered in National Zoological Collection of ZSI. A Pictorial guide to Protected Marine Animals of India has been prepared and submitted to ZSI for publication. Final draft on the Management Plan for Lohabarrack Crocodile Sanctuary has been submitted to the Department of Environment and Forests, A&N Administration. Dr. C. Raghunathan, Scientist-C and Officer-in-Charge made a presentation on 2<sup>nd</sup> draft of Management Plan for Lohabarrack Crocodile Sanctuary: 2012-2021 for the officials of Forest Department on 14<sup>th</sup> March and served as a member to assess the feasibility report on the proposed Oceanarium in the Directorate of Tourism, A&N

Administration on 26<sup>th</sup> March 2012.

#### **Publications:**

1. Yogesh Kumar, J.S. and C. Raghunathan, 2012. Recovery status of scleractinian corals and associated fauna in the Andaman and Nicobar Islands. *Phuket Marine Biological Centre Research Bulletin*, 71: 63-70.
2. Koushik Sadhukhan and C. Raghunathan, 2012. Studies on scleractinian coral diversity in Inglis Island Sanctuary, Andaman and Nicobar Islands, India. *World Journal of Fish and Marine Sciences*, 4(1); 31-36.
3. Sivaperuman, C., 2012. Species composition and abundance of bird populations in the Thar Desert, India. In: *Desert: Fauna, Flora and Environment*, J.C. Guevara *et al.* (Eds.), Nova Science Publishers Inc., New York, p.79-102.



Polyclad *Pseudobiceros hymanae* Newman & Cannon



Soft Coral *Cirrhipathes anguina* (Dana)



Soft coral *Heniochus acuminatus* (Linnaeus)



Soft coral *Lobophytum crassum* von Marenzeller



Soft coral *Sarcophyton trocheliophorum* Von MarenzellerFish *Pterois miles* (Bennett)Fish *Chaetodon auriga* ForsskalFish *Heniochus acuminatus* (Linnaeus)

### North Eastern Regional Centre, Shillong

A field survey in East Khasi Hills District, Meghalaya was conducted from 20<sup>th</sup>-24<sup>th</sup> March to study Cerambycidae: Coleoptera. A one day local survey tour in Mawlyngot village, East Khasi Hills, Meghalaya was also conducted on 7<sup>th</sup> March to study the mass migration of earthworms in the area. During the month, 11 species of fishes, 8 species of aquatic Hemiptera and 2 species of amphibia were identified from the collections of the earlier survey in Ri-Bhoi district, Meghalaya. Images and metadata of 1 Holotype and 5 Paratypes of *Aborichthys rosammai* (Pisces: Cypriniformes: Balitoridae) were digitized. The manuscript on the *Pictorial Handbook on Fishes of North East India* was submitted. Laboratory facilities were rendered to Prof. Dr. Annemarie Ohler, Museum

National d'Histoire Naturelle, Paris, France, who visited the Centre on 9<sup>th</sup> March, 2012 to study the amphibian types. Laboratory facilities were also rendered to Dr. H.T. Lalremasanga, Dept. of Zoology, Mizoram University, Aizawl, Mizoram, who visited the Centre on 1<sup>st</sup> March to study fishes and reptiles in the collection holdings. The Centre participated at the State Level Science & Environment Fair, 2012, organized by the State Council of Science Technology and Environment (SCSTE) Meghalaya on 6<sup>th</sup> and 7<sup>th</sup> March, as part of the National Science Day Celebration-2012 and put up a stall exhibiting the fauna of N.E. India and also the publications of ZSI.





Stall of NERC at the Meghalaya State level Science & Environment Fair, 2012



Dr. Annemarie Ohler, Curator, Natural History Museum, Paris, France during her visit to NERC

### Sunderban Regional Centre, Canning

A field survey was conducted in and around Canning fish landing centre and Dabu Mangrove area along the coast of Matla estuary on 28<sup>th</sup> of March 2012, under the annual programme "Preliminary studies on faunal diversity in the fish landing centers of Sunderbans" and representative faunal samples collected. Dr. D. Suresh Chand, Scientist-C and Officer-in-Charge attended the "1<sup>st</sup> Biennial International Congress on Urban Green Spaces" at New Delhi from 5<sup>th</sup>-7<sup>th</sup> March, 2012.



*Scatophagus argus*

### Arunachal Pradesh Regional Centre, Itanagar

During the month, 16 species of butterflies were identified. A survey tour to Pakke Tiger Reserve was undertaken to study the bird communities of the reserve from 30<sup>th</sup> March.

Over 40 school students and a research scholar from the G.B. Pant Institute of Himalayan Environment and Development, Itanagar visited the library for reference work.

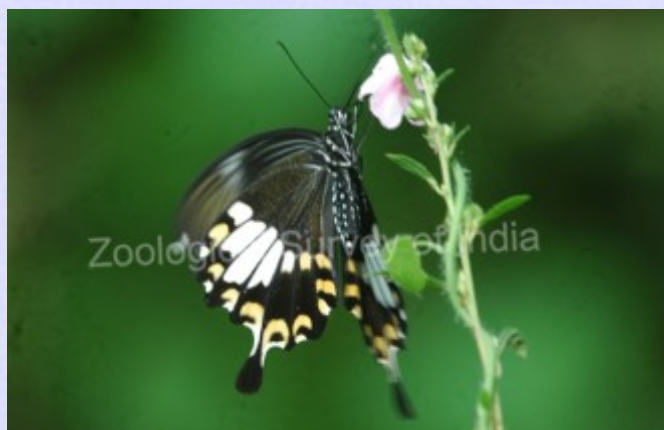
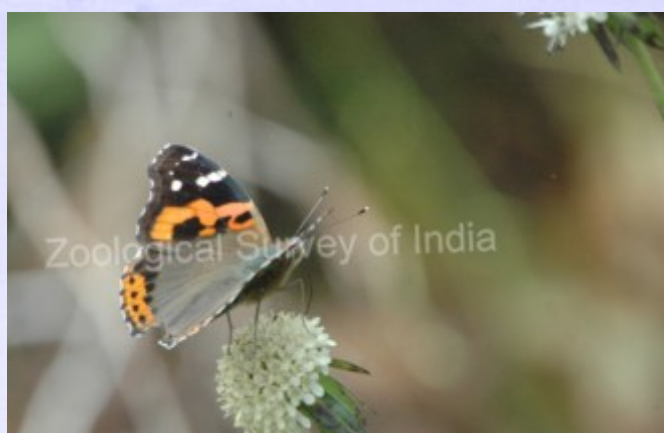


*Aulocera swaha*



*Cirrochroa aoris*



*Papilio helenus**Tanaecia lepidea**Vanessa indica**Zemerus flegyas*

### Western Ghat Regional Centre, Kozhikode (Calicut)

A field survey was conducted in Malabar Wildlife Sanctuary, Kakkayam, Kozhikode district, Kerala on 19<sup>th</sup> March and representative faunal samples collected. Three species of Pteromalidae (Hymenoptera) and 3 species of Centipedes (Chilopoda) were identified.

During the month, four species of Fairyflies viz. *Camptoptera muiri* (Perkins), *Erythmelus (Erythmelus) lygivorus* Viggiani et Jesu, *Omyomymar silvanum* (Ogloblin), *Erythmelus (Erythmelus) nuinu* Triapitsyn (Mymaridae: Chalcidoidea Hymenoptera) were reported for the first time from India.

Seven papers were published during the month.

Dr. K. Rajmohana initiated the generic/species level identification of the unidentified macro Hymenoptera in the insect collection at the Centre. Dr. Muhamed Jafer Palot participated in the bird survey of Aralam Wildlife Sanctuary,

Kannur district, Kerala from 9<sup>th</sup>-11<sup>th</sup> March, organized by the Kerala Forests & Wildlife Department and the Malabar Natural History Society, Kozhikode.

Dr. P. M. Sureshhan, Scientist-C, Dr. K. Rajmohana, Scientist-C and Dr. Muhamed Jafer Palot, Asst. Zoologist, as resource persons, attended the National level Seminar on 'Faunal Diversity of Kerala', organized by the Department of Zoology, Pazhassi Raja NSS College, Mattanur, Kannur, Kerala on 23<sup>rd</sup> and 24<sup>th</sup> March and delivered talks on 'Insect diversity of Kerala-an overview', 'Essentials in Biodiversity Science: A Kerala Perspective' and on "Herpetofaunal diversity of Kerala", respectively.

Identification services were rendered to M.Sc students of Farooq College, Calicut, Kerala, on Insecta.



Dr. Sudhir Singh, Scientist-E, Forest Research Institute, Dehradun, visited the Centre from 19<sup>th</sup>-26<sup>th</sup> March, for studying the Types of Chalcid wasps in the faunal holdings of the Centre.

Dr. P. M. Sureshan supervised the research project of a JRF of the Centre. Dr. K. Rajmohana supervised the research projects of the two JRFs of the Centre and also those of two M. Sc. students from Govt. College, Madappally, Calicut, attached to the Centre for their project work.

C. Radhakrishnan, Scientist-F & Officer-in-Charge, attended the Programme Advisory Committee North Zone meeting of ZSI on 24<sup>th</sup> March, at HARC/ZSI, Solan, as an invited member.

The Centre organized a National level Hands on training Workshop on *Principles and practices of Animal Taxonomy with special reference to insects* from 27<sup>th</sup> February to 3<sup>rd</sup> March 2012 [http://zsi.gov.in/right\\_menu/Calicut%20training/index.html](http://zsi.gov.in/right_menu/Calicut%20training/index.html)

During the month, 154 visitors paid their visits to the museum.

#### **Publications:**

1. S. Manickavasagam, A. Ramesh Kumar and K. Rajmohana, 2011. First Report of four Species of Fairyflies from India, Key to Indian Species of Four Genera and Additional Distributional Records of Mymaridae (Hymenoptera: Chalcidoidea) *Madras Agric. J.*, 98 (10-12): 393-408.
2. Muhamed Jafer Palot, Balakrishnan VC, Balakrishnan, V. and S. Kalesh, 2012. An Updated Checklist of Butterflies of Kerala with their Malayalam names. *Malabar Trogon*, 9 (3): 22-30.
3. Muhamed Jafer Palot, 2012. Kanara Oak Blue, *Arhopala alea* (Hewitson, 1862). *ZSI e NEWS*, 4(2):19.

4. Rajmohana. K., 2012. Essentials in Biodiversity Science. In: *Proceedings of National Seminar on Faunal diversity of Kerala*, 23<sup>rd</sup>-24<sup>th</sup> March 2012, organized by the Department of Zoology, Pazhassi Raja NSS College, Mattanur, Kannur, Kerala; pp: 16-17.
5. Sureshan, P.M., 2011. Insect diversity of Kerala, an overview. In: *Proceedings of National Seminar on Faunal diversity of Kerala*, 23<sup>rd</sup>-24<sup>th</sup> March 2012, organized by the Department of Zoology, Pazhassi Raja NSS College, Mattanur, Kannur, Kerala; pp: 18-22.
6. Muhamed Jafer Palot and C. Radhakrishnan, 2012. Herpetofaunal diversity of Kerala. In: *Proceedings of National Seminar on Faunal diversity of Kerala*, 23<sup>rd</sup>-24<sup>th</sup> March 2012, organized by the Department of Zoology, Pazhassi Raja NSS College, Mattanur, Kannur, Kerala; pp: 31-44.
7. Ritty V. James, Rajmohana K., P. T. Leena, 2012. Hymenopteran egg parasitoids of stem borers (Lepidoptera) on paddy. In: *Proceedings of National Seminar on Faunal diversity of Kerala*, 23<sup>rd</sup>-24<sup>th</sup> March 2012, organized by the Department of Zoology, Pazhassi Raja NSS College, Mattanur, Kannur, Kerala; pp: 70-72.



*Dvivarna punctatus* Veenakmari & Rajmohana  
(Hymenoptera: Platygasteridae)





*Aphanogmus fijiensis* (Ferriere)  
(Hymenoptera: Ceraphronidae)



*Otostigmus politus* Karsch  
(Chilopoda: Scolopendridae)



*Scolopendra morsitans* Linnaeus  
(Chilopoda: Scolopendridae)



**ANIMAL OF THE MONTH****Anaimalai Spiny Lizard***Salea anamallayana* (Beddome, 1878)

[Text &amp; Photo: Muhamed Jafer Palot, WGRC/ZSI, Calicut]

The Anaimalai Spiny Lizard, *Salea anamallayana* (Beddome, 1878), is a highland agamid lizard species, mostly confined to the montane shola forest ecosystems up to an elevation of 7000ft. in the southern Western Ghats. The species is known only from the Anamalai and Palni hills of Tamil Nadu and Kerala. This is a large lizard (20cm) with light brown upperparts and V-shaped dark brown marks separated by narrow cream-coloured areas. Head is larger and brown in colour with white spots. A distinct curved fold is present on each side of the neck, in front of the shoulders. The crest on top of the back of the head is made up of large lance like

spines of unequal size. Limbs and tail are with more or less regular dark-brown cross bars. These lizards are sexually dimorphic. Males typically have a large crest that extends to the tail. Females have a small crest. Males are with a large gular sac, which extends up to the chest; in females the gular sac is represented by a short fold. The species is diurnal, highly arboreal and feeds mainly on insects. Up to 3 clutches may be produced in summer, each comprising of 3-5 eggs. Another close relative of this species, *Salea horsfieldii* Gray is restricted to Nilgiri and Palni Hills.

**CHECKLIST OF INDIAN FAUNA****Soldier flies from India**<http://zsi.gov.in/checklist/SOLDIER%20FLIES%201.pdf>



## OUT OF THE BOX

### **New species of caecilian amphibian reported from Kerala**

<http://www.thehindu.com/sci-tech/energy-and-environment/article3336880.ece>

### **New species of fish discovered in Kalpangi River**

[http://zeenews.india.com/news/eco-news/new-species-of-fish-discovered-in-kalpangi-river\\_761087.html](http://zeenews.india.com/news/eco-news/new-species-of-fish-discovered-in-kalpangi-river_761087.html)

### **MP introduces novel concept to keep Narmada healthy**

[http://zeenews.india.com/news/eco-news/mp-introduces-novel-concept-to-keep-narmada-healthy\\_760354.html](http://zeenews.india.com/news/eco-news/mp-introduces-novel-concept-to-keep-narmada-healthy_760354.html)

## PAINTINGS FROM ZSI HERITAGE ALBUM

### **Blackbuck**

*Antelope cervicapra* (Linnaeus, 1758)





## OBITUARY



Dr G. Thirumalai

Dr G. Thirumalai was born on 3.12.1953 in Alwarthirunagari near Tirunelveli District, Tamil Nadu and completed his primary school education there. After his parents moved to Chennai in late 1960s, he matriculated in Ramakrishna Mission High School, Thiyagaraya Nagar, Chennai. He subsequently took M. Sc. (Zoology) degree from Pachaiyappa's College, Chennai. Dr Thirumalai was enrolled in Loyola College, one of the leading post graduate colleges of Madras University, for his research under the guidance of the distinguished entomologist and former Director of Zoological Survey of India, Prof. T. N. Anathakrishnan and was awarded Ph.D degree (Entomology) in 1981.

Dr Thirumalai was selected as Scientist-B' in Zoological Survey of India (ZSI) and he joined the Southern Regional Centre of ZSI at Chennai on 13.8.1979. Dr Thirumalai led several faunal survey tours especially the Silent Valley

Expedition, Tamil Nadu State surveys, conservation and wild life sanctuary surveys in Tamil Nadu, Karnataka and Andhra Pradesh. At the beginning his scientific carrier, Dr Thirumalai worked on Membracidae (Homoptera) and published a series of papers/ occasional publications on several taxa new to the science. As years passed, Dr Thirumalai expanded his field of interests to Aquatic and Semi Aquatic Bugs (Heteroptera) and became India's authority on these insects, publishing prolifically innumerable number of research papers including the descriptions of new taxa. Because of his unstinted and meritorious work through the years, Dr. Thirumalai was elevated to the posts of Scientist 'C', 'D', 'E' & 'F'. Dr. Thirumalai had to his credit more than 70 research papers, occasional papers and books and all his works can be accessed from:

<http://zsi.gov.in/aboutus/profile/5.pdf>.

Dr. Thirumalai served a greater part of his career spanning nearly 25 years with the Southern Regional Centre, 5 Years in Arunachal Pradesh Regional Centre, Itanagar and a little over 1 year at the Head quarters of ZSI at Kolkata. With the vast experiences of Dr. Thirumalai, he was designated as Officer-in-Charge, Southern Regional Centre for 8 years, holding the position of Chairman and distinguished member of several committees of ZSI.

Dr G. Thirumalai passed away in the early hours on 13.03.2012. He is survived by his wife Mrs. Anuradha Thirumalai and son Shri Govindarajan. May Dr Thirumalai's soul rest in peace.