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*ZSI in the 97th year of Service to the Nation
(1916 to 2012)*



ZSI e-NEWS

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Headquarters, Kolkata

During the month, the scientists of Headquarters identified, 3 species of Protozoa, 4 species of Collembola, 21 species of Hemiptera, 8 species of Hymenoptera, 6 species of Odonata, 5 species of Orthoptera, 8 species of Coleoptera, 6 species of Isoptera, 2 species of Crustacea, 58 species of Mollusca, 24 species of fishes, 5 species of Amphibia and 5 species of mammals from the States of Andhra Pradesh, Assam, Arunachal Pradesh, Chhattisgarh, Delhi, Gujarat, Himachal Pradesh, Jharkhand, Jammu & Kashmir, Karnataka, Kerala, Maharashtra, Odisha, Tamil Nadu, Uttarakhand, Uttar Pradesh, West Bengal and also from Kanyakumari Wild Life Sanctuary & South Eastern Ghats (Tamil Nadu), Sajnakhali Wild Life Sanctuary and Narendrapur Bird Sanctuary (W. Bengal).

A Type specimen of Hemiptera and 204 slides containing 48 species of Diptera were deposited in the National Zoological Collection. Three paratypes of *Physoschistura chinwinensis* were deposited by Prof. W. Vishwanath, Manipur University, Manipur. Besides, 6 syntypes of *Syphisanodon xanthopterygion* Anderson and Bineesh and 4 syntypes of *Collichthyes pinnaflavis* Greenfield, Bineesh and Akhilesh were deposited by Sri K.K. Bineesh, C.M.F.R.I., Kochi.

A new species belonging to the Cyprinid genus *Garra* has been discovered. The Assam Painted Frog, *Kaloula assamensis* has been recorded for the first time from Bihar. A collection of *Xenorhynchium nitidulum* (Fabricius) (Hymenoptera: Eumeninae) turned out to be new records from Himachal Pradesh, Jharkhand, Maharashtra and Pondicherry. The marine fish *Dactyloptena papilio* (Cuvier) has been recorded for the first time from Indian waters and *Cheilopogon suttoni* (Whitley & Colefax) from Tamil Nadu coast.

Four research papers were published, 4 accepted and 9 communicated during the month.

Identification and advisory services were rendered on eight lots of specimens, received from different institutions and organizations. Identification and advisory services were rendered to Dr. Arunima Bajpai, Sr. Scientific assistant, Central Pollution Control Board, Kolkata on water bugs. Nine species of freshwater shrimps were identified for the students from Vivekananda College, 24 Paraganas. Advisory services were rendered on freshwater crabs and prawns of Assam to Ms. Mohua Chakraborty, Research Scholar, Assam University, Silchar, Assam. Shri. S. De, Vishwaroop Housing Society, Kolkata was given information on Brachyuran crabs of Bakkhali. Sunitha, S., Research Scholar, Zoological Research Centre, Fathima Mata National College, Kollam, Kerala and Dr. Attaur Rahman, Principal Scientist, ACCRP, Assam Agricultural University, Jorhat, Assam were provided with the identification and advisory services on termites of Kerala and on Social insects respectively. Plankton samples received from Dr. Shashikanth Majahi, Asst. Professor, Govt., College Karnataka and Dr. E. Malini, Asst. Professor, Queen Mary's College, Chennai as well as the freshwater Mollusca received from Zoology Department, Calcutta University were identified and identification services rendered.

The seized scales derived from Indian Pangolin, *Manis crassicaudata* and a full length skin of Indian Tiger, *Panthera tigris* received for identification were identified for the Deputy Director, WCCB, Eastern Zone, Kolkata and ADFO, Darjeeling Wild life Division, respectively.

Dr. K. A. Subramanian, Scientist-C reviewed 13 project proposals for DST-Animal Sciences Programmes. He participated in the "National Level Hands-on Training Workshop on Principles and Practices of Animal Taxonomy with Special Reference to Insects" at WGRC,

ZSI, Kozhikode, Kerala, as a resource person. Three post graduate students from the Department of Zoology, West Bengal State University, Barasat, Kolkata, joined the Bird Section for completing their M. Sc. project work, under Dr. K. A. Subramanian.

Dr. Sheela Roy Associate Professor & Head of the Dept. of Zoology along with 6 Postgraduate students of Vidyasagar college, Kolkata, visited different Sections/Divisions of the Headquarters. Dr. A. Rahman, Principal Scientist, A.A.V, Jorhat, Assam, visited the Hymenoptera Section for studying bees. Mrs. Sarbani Nag, Research Scholar, Wildlife Institute of India, Dehradun, visited the Amphibia & Protochordata Section on 21st February, 2012.

Sri Shuvajit Chakrabarty, Sr. Zool. Assist. attended the National Conference on Biodiversity Assessment, Conservation & Utilisation, at the Dept. of Biodiversity, Abasaheb Garware College, Pune, from 9th-11th February. Dr. V. D. Hegde, Scientist-C attended the above said Conference and gave an oral presentation on "Biodiversity and extraordinary adaptability of the darkling beetles (Insecta: Coleoptera: Tenebrionidae)" and also participated in the poster presentation on "Observation on the relationships of beetles and flowers with special reference to Sap beetles". Dr. N. Saha, Scientist-B attended the UGC Sponsored State Level Seminar on "Marine Biodiversity: its Basic and Applied Aspects" on 14th February, organized by the Department of Zoology, Charuchandra College, Kolkata, in collaboration with Z.S.I , Kolkata. Shri S.S. Mishra, Scientist-B of Marine Fish Section attended and participated in the training programme on ICZM at Digha to impart practical Training to the participants. Dr. R. Babu, Scientist-C, attended the Prof. U. S. Srivastava Memorial Lecture at the Indian Institute of Chemical Biology, Jadavpur, Kolkata on 23rd February, 2012. Dr. Sheela, S., Scientist-C attended the UGC sponsored

Training for Women Scientists on "Biodiversity Conservation" at Wild life Institute of India, Dehradun from 6th-10th February. Dr. K. A. Subramanian and Dr. Gaurav Sharma, Scientist-C (DRC, Jodhpur) conducted an EIA study on fauna in Gurha, Bikaner, Rajasthan, from 5th-11th February. Shri K.C. Gopi, Scientist-E and Head of Fish Division attended a seminar on behalf of Director, ZSI and delivered the Keynote address on "Marine Diversity of India" and Shri S.S. Mishra, Scientist-B of Marine Fish Section also attended the seminar at Charuchandra College, Kolkata on 14th February.

The National Green Tribunal, Kolkata Bench had its first sitting on 10th and 11th February, 2012 in the Auditorium of the FPS Building, ZSI, Kolkata.

Dr. Animesh Bal, Scientist-F participated in the First State Government Official's Training under the ICZM Project funded by the World Bank between 24th February and 1st March, 2012 and also delivered a lecture to the trainees in the Inaugural Programme at Marine Aquarium and Regional Centre, ZSI, Digha. Dr. Animesh Bal, reviewed two manuscripts of scientific papers on hemipteran fauna of Namdapha National Park and Tiger Reserve.

Dr. K. Venkataraman, Director, attended the meeting pertaining to the Conference of Parties (CoP-11) and the Planning Commission meeting held on 6th, 8th & 10th February, 2012 at New Delhi. Dr. K. Venkataraman attended the National Conference entitled "Wetland Conservation and sustainable development" organized by Gujarat Institute of Desert Ecology held on 17th and 18th February at Gujarat. Dr. K. Venkataraman delivered the welcome address during the Training Programme on Integrated Coastal Zone Management for State Government Officials sponsored by World Bank between 24th February and 1st March, 2012 at MARC, ZSI, Digha. He inaugurated the "National level Hands-on Training Workshop on Principles

and Practices of Animal Taxonomy with special reference to Insects" and delivered a keynote address at WGRC, ZSI, Calicut on 27th February. Dr. K. Venkataraman was felicitated on receiving the award of the Fellow of National Academy of Sciences (Prof. U.S. Srivastava memorial lecture award) at the Indian Institute of Chemical Biology, Jadavpur, Kolkata on 23rd February, 2012.

Two books were published on "Fauna of India: Acanthocephala" and on "Status of Biodiversity of West Bengal".

Three books and 641 bound / unbound journals were added to the Library Section.

Publications:

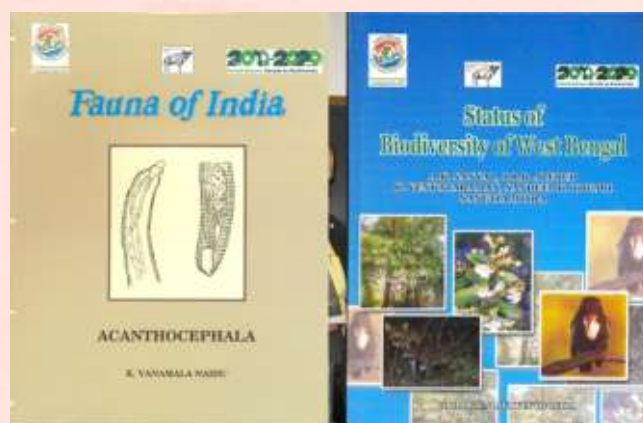
1. Chandra, K. & Jehamalar, E. Eyarin. 2012. *Lathriobates manohardasi* sp. nov. (Hemiptera: Gerromorpha: Gerridae) from Tamil Nadu, India, with a key to the species. *Zootaxa*, 3186: 6468.
2. Chandra, K. & Jehamalar, E. Eyarin. 2011. New records of Gerromorpha, Leptopodomorpha and Nepomorpha (Heteroptera, Insecta) from Madhya Pradesh, India. *Biodiversity Journal*, 2 (4): 209-212.
3. P.Girish Kumar and Lambert Kishore (2011). Redescription and new distributional records of *Xenorhynchium nitidulum* (Fabricius) (Hymenoptera: Vespidae: Eumeninae) from

various states of India. *Uttar Pradesh Journal of Zoology*. 31(3):311-316.

4. De, J. K., Sanyal, A. K. and Kankane P.L. 2011. The jackals of Tollygung club. *Rec.Zool. Surv.India*. 111 (part-1) pp 37-45.



Dr. K. Venkataraman, Director, ZSI, receiving the Fellow of National Academy of Sciences award (Gold medal and Certificate), at the Indian Institute of Chemical Biology, Jadavpur, Kolkata on 23rd February, 2012.



Books Published

Central Zone Regional Centre, Jabalpur

During the month, 10 species of Neuroptera, 16 species of Hemiptera and 11 species of Araneae were identified and registered from Singhori Wildlife Sanctuary and Veerangana Durgawati Wildlife Sanctuary, Madhya Pradesh. Identification and advisory services were rendered to a student of M.E.S Abasaheb Garware College, Pune on two species of small mammals and 27 species of moths (Lepidoptera) and to Dr. Yashashri Gadhihar, Assistant Professor, Dept. of Zoology, Govt. Vidarbha Institute of Science and Humanities, Amravati, Maharashtra. Two research papers

were published and one research paper communicated, during the month.

Publications:

1. Chandra, K., Sandeep Kushwaha, Devanshu Gupta and Shivesh Pratap Singh. 2011. Records of some insects associated with *Calotropis procera* (Asclepiadaceae) in Jabalpur District (M.P.), India. *National Journal of Life Science*, 8(2): 131134.
2. Talmale, S. S. 2011. Occurrence of Fulvous Fruit Bat *Rousettus leschenaultii* (Desmarest) (Mammalia: Chiroptera) in Radhanagari

Wildlife Sanctuary, Maharashtra, India. *Small Mammal Mail Bi-Annual Newsletter of*

CCINSA & RISCINSA, Volume 3, Number 2, Jul-Dec 2011: 40-42.



Canis aureus Linnaeus, 1758



Funambulus pennantii Wroughton, 1905



Herpestes edwardsii (E. Geoffroy, 1818)



Semnopithecus entellus (Dufresne, 1797)



Macaca mulatta (Zimmermann, 1780)



Pteropus giganteus (Brunnich, 1782)

Western Regional Centre, Pune

During the month, 7 species of Odonata, 1 species of Collembola, 1 species of Hemiptera, 2 species of Coleoptera, 5 species of Hymenoptera, 4 species of Lepidoptera, 4 species of Orthoptera and 5 species of freshwater crabs were identified. Sixteen examples of Collembola and 15 examples of soil

mites from CAZRI, Jodhpur (Rajasthan), Photographs of reptiles from A.S.C. College, Manchar, dung beetles and other insect specimens from Dept. of Zoology, University of Pune, fish specimens from Walchand College, Solapur and Bharati Vidyapeeth, Pune, horn samples from the Forest Department,

Mirajgaon and Range Forest Officer, Pune, and one skin sample from Crime Branch, Pune city received for identification were identified and identification services rendered. Dr. R.M. Sharma, Scientist-D & Officer-in-Charge, delivered an invited lecture on “*Insect Diversity in India and Conservation*” on 4th February 2012 at A.A. Arts, Commerce and Science College, Manchar, Pune District. He also delivered lectures on “*Insect Diversity*” and “*Family Cecidomyiidae (Diptera)*”, during the National level Hands-on Training Workshop on Principles and Practices of Animal Taxonomy with special reference to Insects at WGRC, ZSI, Calicut on 28th February 2012. Dr. R.M.Sharma,

Shri S.K. Pati, Zool. Asst., Dr. S.S. Jadhav, Sr. Zool. Asst. and Smt. Priyanka Dutta Saha, participated in the National Conference on Biodiversity Assessment, Conservation and Utilization at M.E.S. Abasaheb Garware College, Pune from 9th -11th February and presented papers and posters. Students of B.Sc. (Zoology) of Annasaheb Awate College, Manchar visited the museum and Laboratory.

Publication:

Kavita Gupta, Shashi Bhalla, Beche Lal, Manju Lata Kapur, Charan Singh and Ruquaeya Bano 2011. Invasive insects detected in imported germplasm, *Indian Journal of Plant Protection*, 39 (3):170-174.



Achatina fulica
Ferussac

Babylonia spirata
(Linnaeus)



Ship-worm, *Bankia destructa*
Clench and Turner

Ship-worm,
Bankia gracilis Moll

Southern Regional Centre, Chennai

During the month, 23 species of Cladocera, 10 species of Rotifera, 19 species of freshwater testate amoebae and 4 species of Lepidoptera from Southern Eastern Ghats were identified. Dr. Sathish Kumar, Sr. Zool. Asst. made a presentation on “*Wetlands and its Conservation in India with special reference to Pallikaranai Marsh*” during the World Wetlands Day Celebrations at Forest Officer's Training Centre, Tamil Nadu Forest Department, Velachery, Chennai, on 2nd February. Dr R. Aengals, Scientist-C, on behalf of the Director, ZSI, attended the 21st Annual General Meeting and Extraordinary General Meeting of the SACON at Coimbatore on 23rd

February. Dr K. Ilango, Scientist-D attended the 2nd Brain Storming Meeting on 'JE and visceral and cutaneous leishmaniasis', organized by the



Dr. K. Ilango, explaining the mandates of ZSI to students

Vector Science Forum under the ICMR on 23rd February at New Delhi and gave a presentation at the meeting on the 'Distribution of *Phlebotomus argentipes* sibling species in kala azar endemic states - Research needs'.

Publication:

Thilak. J and Jayalekshmi Balaji. 2011. A preliminary study on zooplankton recorded from Puzhal Lake, Chennai (T.N), India. *National Journal of Life Sciences*, Vol.8 (2) 77-87.

Marine Biology Regional Centre, Chennai

A Marine museum of the Centre was inaugurated by Shri. R. Mehta, Advisor, Ministry of Environment and Forests (MoEF), Govt. of India, New Delhi, in the presence of Dr. K.Venkatraman, Director, ZSI and Shri. B.M. Malhotra, Chief Engineer, MoEF. Dr. Rajkumar Rajan, Scientist-C assessed the status of sea cucumber in Keezhakkarai and Turicorin group of islands of Gulf of Mannar Biosphere Reserve. Dr. L. Bindu Scientist-C and Dr. G. Sivaleela, Scientist-B conducted field surveys in Palkbay and collected specimens of sea grass associated protozoans and some minor phyla. Scientists of the Centre identified 11 species of sea grass associated foraminiferans, 4 species of marine sponges, 4 species of crustaceans and 3 species of echinoderms out of the materials collected

from Palkbay. During the month, 22 identified species were digitized and metadata compiled. Dr. C. Venkatraman Scientist-C & Officer-in-Charge attended the Institutional Animal Ethics Committee (IAEC) meeting at Sri Ramachandra University, as an external scientist, and delivered a talk on "Threats to Coastal Biodiversity" in the First training programme on "Integrated Coastal Zone management for the State Government Officials", organized by MARG/ZSI, Digha. Eighty live specimens of echinoderms, fishes and reptiles were introduced in the marine aquarium and 1200 students and tourists visited the marine aquarium and museum during the month.



Shri. R. Mehta, Advisor, MoEF inaugurating the MBRC museum



A view of the marine museum

Northern Regional Centre, Dehra Dun

A field survey was undertaken in Dehradun District and representative fauna belonging to 13 groups collected, besides collecting samples of helminth parasites from amphibia and nematodes from soil samples. Digitization of 20 species of Pisces were done and metadata entered in Vertebrate database, while, the metadata of 20 nematodes were entered in the Invertebrate database.

Slides of Cross section of hairs (PGH) were prepared for 4 species of Lagomorpha, *Octona m. macrotis* (Gunther), *Lepus nigricolis* Cuvier, *Lepus arabis* Ehrenberg and *Octona ladacensis* (Gunther) for Trichotaxonomic studies.

Two projects funded by the Department of Science & Technology (DST), New Delhi, were sanctioned, namely, "Abundance and diversity of soil nematodes in Agro-ecosystems of Dehradun" and "Molecular study of *Ratufa indica* (Erxleben), *Ratufa macroura* (Pennant), *Ratufa bicolor* (Sparrman), *Petinomys fuscicapillus* (Jerdon), *Funambulus palmarum*

(Linn.), *Funambulis pennantii* Wroughton, *Petaurista petaurista* (Pallas), *Petarista philippensis* (Elliot) (Mammalia: Rodentia: Sciuride)", to two scientists of the Centre, Dr A.N.Rizvi, Scientist-C & Dr Archana Bahuguna, Scientist-C, respectively.

Shri P.T. Bhutia, Scientist-F & Officer-in-Charge, attended the National Science Day, organized by ONGC & UCOST, Dehradun, on 28th February, on invitation from the Director General, UCOST, Dehradun. Dr. P.C.Tak, Scientist-D was deputed to attend the XXVII Meeting of the Training, Research & Academic Council (TRAC) of Wildlife Institute of India held on 21st February at WII, Dehradun. Dr P.C.Tak provided advisory services to a PG student (who had qualified the IFS written examination) of ICFRE, Dehradun on bird watching, trekking and climate change. Shri N.S. Napalchyal, IAS, Chief Information Officer, Uttarakhand visited the Museum and 10 students visited the Library of the Centre.

Marine Aquarium cum Regional Centre, Digha

Inauguration of the first Training Programme on Integrated Coastal Zone Management for State Government Officials under ICZM Project sponsored by World Bank was held at the Centre on 24th February, 2012. The training was organized for 7 days and it was conducted under the capacity building of State Government Officials for effective implementation of ICZM in the State. The inauguration programme was presided over by Dr. K. Venkataraman, Director, ZSI and other distinguished guests on the occasion were Prof. Amallesh Choudhury, Secretary, SBMRI and Dr. Somenath Bhattacharyya, Addl. Director, ICZMP SPMU, West Bengal. Three different leaflets on the training programme and threatened fauna were released. During the programme, Director, ZSI was felicitated on his receiving the award of the Fellow of National

Academy of Sciences (Prof. U.S. Srivastava memorial lecture award) at the Indian Institute of Chemical Biology, Jadavpur, Kolkata on 23rd February, 2012. The participants of the training were nominated by the Fisheries Department, Forest Department, West Bengal Pollution Control Board, Department of Environment and the Police Department. There were 16 technical presentations during the technical sessions by eminent resource persons from various parts of India. The training also included field training at Mandarmoni, Shankarpur, Digha, Udaipur & Talsari beaches. During the month, 201 examples of live marine ornamental exhibits were displayed for exhibition in the aquarium tanks. The major attractions among the aquarium exhibits during the month were Sucker fish (*Echenis*

naucrates) and sting ray (*Hymantura gerrardi*). A group of 2000 students of All India Scouts and Guides visited the Aquarium on 1st of February and the aquarium received an average of 350



tourists per day during the month. A fish species, *Naso reticulatus* (Randall, 2001) was recorded as new to the Indian waters.



During the inauguration of the first Training Programme on Integrated Coastal Zone Management



Naso reticulatus (Randall, 2001)

High Altitude Regional Centre, Solan

A field survey in Chail WLS was conducted during the month and faunal observations made were recorded. During the month, 4 species of butterflies from Kalatop-Khajjiar



Aulocera swaha Kollar

WLS, Chamba district and 2 species of fishes from Chail WLS, Solan district were identified. One research paper was published. Dr. Avtar Kaur Sidhu and Dr. Indu Sharma, Scientist-C



Pied Bushchat

presented research papers in the National Conference on Biodiversity Assessment, Conservation and Utilization held at Abasaheb Garware College, Pune from 9th-11th February. Dr. Avtar Kaur Sidhu, acted as a resource person and delivered an invited lecture on "Climate change and biodiversity in cold deserts of Ladakh", in BBMB College,

Gharshankar, Hoshiarpur, Punjab on 15th February and also attended the International Conference of Entomology at Punjabi University, Patiala on 17th February. She also attended the meeting of the Jammu and Kashmir Wildlife Board, as a member, on 3rd February.

Desert Regional Centre, Jodhpur

During the month, 4 genera of nematodes, 17 species of Lepidoptera and 4 species of Pisces were identified. Dr. Gaurav Sharma, Scientist-C delivered a lecture on "Faunal diversity of Rajasthan and efforts on conservation of Biodiversity" to M.Sc. students of the Department of Zoology, Aligarh Muslim University, Aligarh. Dr. Gaurav Sharma was invited as Chief Guest during the inauguration of "School students' Science Project Gallery" at Adarsh Vidya Mandir School, Jodhpur. Dr. Sanjeev Kumar, Scientist-C delivered a lecture on "Biodiversity of Rajasthan" in the Capacity Building Training Programme, organized by the Office of the Dy. Conservator of Forest, Desert Forest Training Centre, Jodhpur. Dr.

Sanjeev Kumar delivered an invited lecture on the "Status of wetland birds in India and importance of coastal wetlands of Gujarat" in the National Conference on wetland Conservation for Sustainable Development-Saving wetlands for people and wildlife, held from 17th-18th February, organised by Guide, Bhuj, Gujarat. Dr. Sanjeev Kumar prepared a booklet on Fauna of Protected Areas of Rajasthan and Gujarat. Dr. Gaurav Sharma and Dr. K. A. Subramanian, Scientist-C (ZSI, Kolkata) conducted the faunal study of Gurah (West) Lignite Mine Area, Bikaner from 5th-10th February, 2012. During the month, 120 School students visited the Museum.



Black Ibis



Eurasian Collared Dove



Indian Peafowl



White throated Kingfisher

Freshwater Biology Regional Centre, Hyderabad

The raw water reservoir Osman Sagar and 2 temporary ponds were visited to conduct seasonal variation studies on the abiotic (physicochemical lake water quality) and biotic factors (zooplankton species composition and seasonal variation therein). Seven species of Cladocera and 6 species of aquatic Coleoptera from Cumbum lake collections were identified. The various representative faunal collections of different wetland faunae-rotifera/ Cladocera/ aquatic insects and fish nekton were continued

to be identified and enumerated. Of the six ongoing research programmes, final report writing on the limnofaunal profile of Kolleru Lake, West Godavari, Krishna District, Andhra Pradesh and limnoecological studies on urban /semi urban lakes were initiated. Preliminary studies on the reservoir fish faunae of Kirshnaraja Sagar, Mandya district, Karnataka revealed species poor diversity, with only 16 species collected /identified. Two advisory services were rendered.



A juvenile Bronze -Winged Jacana (*Metopidius indicus*)



Laccophilus griseus



Cybister tripunctatus



Lethocerus indicus

Gangetic Plains Regional Centre, Patna

During the month, 11 species of Noctuidae (Lepidoptera) and 14 species of Mollusca were identified. One research paper was published. Dr. Navneet Singh, Scientist-C co-chaired a scientific session and presented a paper in an International conference on Entomology, organized by the Department of Zoology & environmental Sciences, Punjabi University, Patiala, from 17th-19th February. Dr. Gopal

Sharma Scientist-C & Officer-in-charge attended the State Wildlife Board meeting on 25th February.

Publication:

Singh, N. & Singh, J. (2012) Genitalic studies of *Amerila eugenia* (Fabricius) (Lepidoptera: Arctiidae) from Karnataka, India. *Journal of Threatened taxa* 4(2):2398-2401.

Sunderban Regional Centre, Canning

A field survey was conducted at Canning and Dabu mangrove areas along the coast of Matla on 27th February. Representative faunal samples were collected including brachyuran crabs, shrimps and fishes. *Varuna litterata* (Varunidae: Decapoda) and *Portunus pelagicus* (Portunidae: Decapoda) were identified out of the collection. Over 50 visitors visited the Museum at the Centre during the month.



Portunus pelagicus



Visitors at SRC, Canning



Varuna litterata

North Eastern Regional Centre, Shillong

A field survey was conducted in Ri-Bhoi district, Meghalaya from 25th February to study and make representative collections of aquatic and semi aquatic Hemiptera. During the month, 5 species of reptiles and 5 species of Amphibia from Manipur and 1 species of Amphibia from the backlog collection of the Centre were identified. Images, description and metadata of 1 Holotype and 20 Paratypes of



Rhacophorus bipunctatus

Danio jaintianensis (Pisces: Cypriniformes: Cyprinidae) were databased. Identification services were rendered on 22 species of fishes for a research scholar from the Department of Ecology and Environmental Sciences, Assam University, Silchar, Assam. Advisory services and laboratory facilities were extended to 5 research students of Prof. W. Vishwanath, Manipur University, Imphal, Manipur, for



Research students studying the fish collection at the Centre

studying the fish collections at the Centre.

Mrs. I. J. Kharkongor, Scientist-C attended the DST sponsored Training programme for

women scientists on "Biodiversity Conservation" at Wildlife Institute of India (WII), Dehradun from 6th-10th February.

Arunachal Pradesh Regional Centre, Itanagar

A flock of Long-tailed Broadbill *Psarisomus dalhousiae* was recorded for the first time since last four years in Itanagar. As a species of broadleaved and semi-evergreen forest, it has been recorded by the scientists of the Centre previously from Pakke Tiger Reserve c. 200 km from Itanagar. During the month, a male and a female Common Green Magpie *Cissa chinensis* were also recorded in Itanagar though it was previously recorded from Namdapha Tiger Reserve. Dr. Gopinathan Maheswaran, Scientist-C & Officer-in-Charge attended the meeting of the Technical Committee for

Protected Areas of Arunachal Pradesh at the office of the PCCF on 13th February and evaluated the research proposals received from various NGOs, Universities and research Institutions within and outside of Arunachal Pradesh. Twenty-two school and college students visited the museum and library during the month.

Publication:

Sinha, B. (2012) Global biopesticide research trends: a bibliometric assessment. *Ind. J. of Agri. Sci.* 82(2):95-101.



Common Green Magpie



Long-tailed Broadbill

Andaman and Nicobar Regional Centre, Port Blair

Marine and terrestrial ecosystems of Haminder Bay, Hut Bay, Brother Island and Dugong creek in Little Andaman have been surveyed during 8th-14th February 2012. Marine faunal communities comprising of 110 species of scleractinian corals, 3 species of gorgonians, 35 species of echinoderms, 37 species of opisthobranchs, 6 species of polyclads, 62 species of gastropods, 3 species of bivalves, 10 species of brachyuran crabs, 1 species of lobster, and 1 species of shrimp and terrestrial animals such as 10 species of odonates, 19 species of

butterflies, 3 species of frogs, 8 species of reptiles, 16 species of Aves and 3 species of fishes from freshwater streams have been identified. Among them 5 species of nudibranchs *Digidentis kulonba* (Burn, 1966), *Flabellina rubropurpurata* Gosliner and Willan, 1991, *Sagaminopteron psychedelicum* Carlson and Hoff, 1974, *Siphopteron nigromarginatum* Gosliner, 1989 and *Siphopteron tigrinum* Gosliner, 1989, and 2 species of polyclads *Phirkoceros fritillus* Newman and Cannon, 1996 and *Pseudoceros leptostichus* Bock, 1913 were

new records to India. A total of 199 specimens including 40 specimens of molluscs, 61 specimens of corals, 24 specimens of echinoderms, 13 specimens of crustaceans, 47 specimens of insects, 6 specimens of frogs, 6 specimens of reptiles and 2 specimens of birds have been registered in National Zoological Collection of ZSI. A poster cum abstract on 'Climate oscillations and coral reef resilience over a decade in Andaman and Nicobar Islands' has been prepared and submitted to the Convention Biodiversity, SBSTTA-16 meeting to be held at Montreal, Canada during 30th April to 5th May 2012. Pamphlet on ZSI/ANRC has been prepared for CoP-11 ZSI showcasing. Second draft of the Management Plan for Lohabarrack Crocodile Sanctuary has been submitted to Forest Department of A&N Administration. Mr. P.T. Rajan, Senior Zoological Assistant delivered a lecture on 'Faunal Communities of A & N Islands' in the refresher course for forest guards on 2nd February and also in National Council for YMCAs of India on 23rd February. Dr. C. Raghunathan, Scientist-C and Officer-in-Charge attended the Expert Committee (Mangroves and Coral Reefs) Meeting of MoEF/GOI held at Annamalai University, Annamalainagar on 9th and 10th February, served as a resource person and delivered a lecture on 'Coast and its importance' in the workshop on Integrated Coastal Zone Management organized by ZSI/MARC, Digha on 26th February.



Opisthobranch *Chromodoris strigata* Rudman, 1982

Publications:

1. Sivaperuman, C., Suresh Kumar Shah, C. Raghunathan and K. Venkataraman, 2011. First report of *Saroba maculicosta* and *Barsine lineatus* from Andaman and Nicobar Islands, India. *Association for Tropical Lepidoptera Notes*, December 2011: 2p.
2. Koushik Sadhukhan and C. Raghunathan, 2012. New record of feather stars (Class: Crinoidea) from Andaman and Nicobar Islands. *International Journal of Plant, Animal and Environmental Sciences*, 2(1): 183-189.
3. Koushik Sadhukhan and C. Raghunathan, 2012. A general account on community structure of echinoderms in North Andaman. *International Journal of Biology, Pharmacy and Allied Sciences*, 1(1): 44-55.
4. Koushik Sadhukhan and C. Raghunathan, 2012. New record of sea star *Nardoa tuberculata* Gray (Echinodermata: Ophidiasteridae) from Andaman and Nicobar Islands. *International Journal of Science and Nature*, 3(1): 1670169.
5. Kumaralingam, S., C. Sivaperuman and C. Raghunathan, 2012. Diversity and distribution of brachyuran crabs from Ritchie's Archipelago. *International Journal of Oceanography and Marine Ecological System*, 1(2): 60-66.
6. Tamal Mondal, C. Raghunathan and K. Venkataraman, 2011. Diversity of scleractinian corals middle and north Andaman Archipelago. *World Journal of Zoology*, 6(4): 407-419.



Opisthobranch *Roboastra gracilis* (Bergh, 1877)



Scleractinian Coral *Favia speciosa* (Dana, 1846)



Scleractinian coral *Goniastrea retiformis* (Lamarck, 1816)



Soft coral *Briareum hamrum* (Gohar, 1948)



Soft coral *Clavularia viridis* (Quoy and Gaimard, 1833)



Scleractinian coral *Stylophora pistillata* Esper, 1797



Coral *Cyphastrea chalcidicum* (Forsk., 1775)

Estuarine Biology Regional Centre, Gopalpur-on-Sea

During the month five species of molluscs from the collection of the Pennar Estuary, Andhra Pradesh were identified and the Annularis and Myzomyia group of Neocellia series of collected mosquitoes were processed for gel-electrophoresis. Genomic DNA was extracted from single individual adult mosquito using the method described by Coen et al (1982). A

research paper was submitted for publication and a research paper was reviewed and comments offered. 203 visitors paid their visits to the museum including 151 students and staff of Army Public School. About 50 students and 5 teachers of the Department of Zoology of Mahishadal Raj College (West Bengal) visited the Centre on 2nd February.



A view of Bahuda Estuary, Odisha



Students of Army School, Gopalpur visiting the museum

Western Ghat Regional Centre, Kozhikode (Calicut)

A new genus, *Dvivarnus* Rajmohana and Veenakumari gen. nov. (Insecta: Hymenoptera: Platygasteridae) and a new species *Dvivarnus punctata* Veenakumari and Rajmohana sp. nov. were described. A taxonomic review of the genus *Xenomerus* Walker (Hymenoptera: Platygasteridae) was done and the species, *Xenomerus atomus* Rajmohana and Narendran was redescribed and revalidated. One species of Ceraphronidae (Hymenoptera) and 4 species of Centipedes (Chilopoda) were identified during the month. Two research papers and 2 booklets were published and 3 research papers submitted for publication by the scientists of the Centre. Two identification services were rendered on birds and confiscated Indian Pond Terrapins. Three local surveys were carried out in Kottooli wetlands, Kozhikode. In connection with ZSI-showcasing at the XIth Conference of Parties (COP-XI) to the Convention on Biological Diversity 2012 to be held at Hyderabad, 2 booklets and 5 brochures were prepared. Dr. P. M. Sureshan, Scientist-C, supervised the research project of a JRF of the Centre. Dr. K. Rajmohana, Scientist-C, supervised the research projects of 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 and also served as the external examiner in Entomology, for the M.Sc. students at Department of Zoology, University of Calicut

on 8th and 9th February.

C. Radhakrishnan, Scientist-F & Officer-in-Charge chaired the Regional Council meeting on 14th February, 2012, at ZSI, Chennai.

The Centre organized a National level Hands on Training Workshop on *Principles and Practices of Animal Taxonomy with special reference to Insects* from 27th February to 3rd March 2012. The Presidential Address was delivered by C. Radhakrishnan, Scientist-F & Officer-in-Charge, WGRC/ZSI, Calicut. Dr. K. Venkataraman, Director, ZSI, Kolkata inaugurated the training workshop and delivered keynote lecture on 'Importance of Taxonomy in Biodiversity Conservation'. Prof. Dr. T. C. Narendran, Emeritus professor, University of Calicut, delivered the second keynote lecture on 'Science of Taxonomy'. Various lectures on Animal Taxonomy and hands on sessions of Insect Orders: Lepidoptera, Diptera, Odonata, Mantodea, Coleoptera, Hymenoptera, Hemiptera, Orthoptera and Aquatic insects were handled in the training by various resource persons. Dr. P. M. Sureshan, Scientist-C, delivered a lecture on Principles and Procedures in Animal Taxonomy (Part-1) and conducted the hands-on session on Mantodea. Dr. K. Rajmohana, Scientist-C and Coordinator of the workshop delivered a lecture on Principles and Procedures in Animal Taxonomy (Part-II); K.G. Emiliyamma, Scientist-C, delivered a lecture

and conducted the hands on session on Odonata and Dr. Muhamed Jafer Palot, Asst. Zoologist, delivered lecture on Butterflies. C. Radhakrishnan, Scientist-F & Convener of the Workshop presented Certificates to the participants. Three booklets (2 by the scientists of the Centre and 1 by the scientist of ZSI, Kolkata) were brought out by the Centre as part of the resource material provided to the participants in the Workshop.

During the month, 964 visitors paid their visits to the museum.

Publications:

1. Rajmohana, K and T.C. Narendran. 2011. A taxonomic review of the Indian species of *Xenomerus* Walker (Hymenoptera: Platygasteridae). *Biosystematica* 5 (2):5-11.

2. Veenakumari K, Rajmohana K, Manickavasagam, S and Mohanraj, P. 2011. On a new genus of *Teleasinae* (Hymenoptera: Platygasteridae) from India. *Biosystematica* 5 (2): 39-46.

Booklets Published in connection with training workshop

1. Muhamed Jafer Palot, C. Radhakrishnan and Balakrishnan Valappil. 2012. *Butterflies (Lepidoptera: Rhopalocera) of Western Ghats*. Zoological Survey of India, Calicut.
2. Rajmohana, K., Bijoy, C. and Muhamed Jafer Palot. 2012. *An Introductory Manual to Common Hymenoptera (Insecta) of Kerala*. Zoological Survey of India, Calicut.
3. K. A. Subramanian. 2012. *Fieldguide to Aquatic Insects of India*. Zoological Survey of India, Calicut.

During the National level Hands-on Training Workshop organised at WGRC/ZSI, Calicut



Dr. K. Venkataraman, Director, ZSI lighting the lamp and inaugurating the Workshop



Dr. K. Venkataraman, Director, ZSI, delivering the inaugural address and the Keynote speech



While the Hands-on sessions in progress

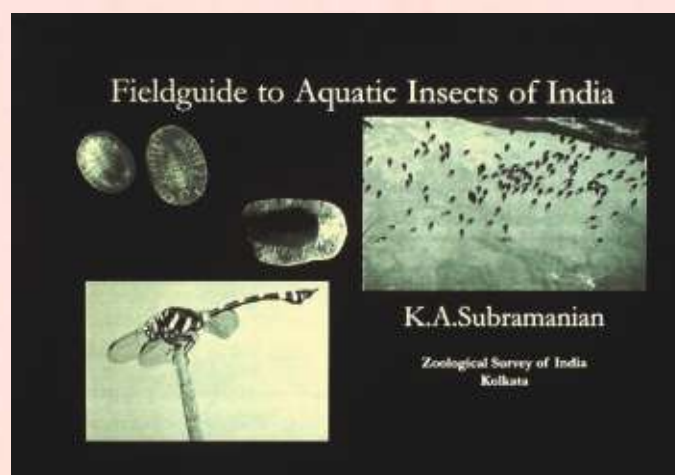
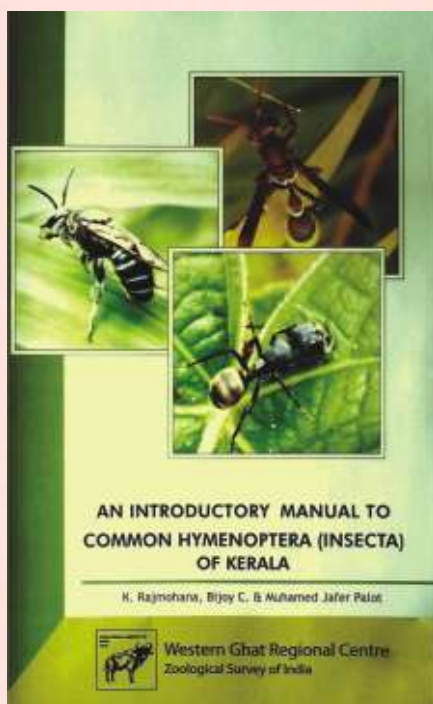


C. Radhakrishnan, Officer-in-Charge,
WGRC/ZSI, Calicut, presenting Certificate to a participant



Group photo of the participants on the valedictory day

Booklets brought out in connection with the workshop



ANIMAL OF THE MONTH**Kanara Oak Blue***Arhopala alea* (Hewitson, 1862)

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

The Kanara Oak Blue, *Arhopala alea* (Hewitson) is one of the lesser known butterflies of the Western Ghats. It is reported from Goa southwards to Kerala. The species is locally common and mainly found immediately after the rainy season. Wings of males are having

dark shiny violet-blue upperparts and purplish brown underparts. Females are much paler and less purplish than males. Larvae are known to feed on the shrubby euphorbia plant *Homonoia riparia* (Willow-leaved Water Croton), commonly found growing along stream beds.

CHECKLIST OF INDIAN FAUNA

Indian Tessarotomidae (Insecta: Hemiptera: Pentatomoidea)

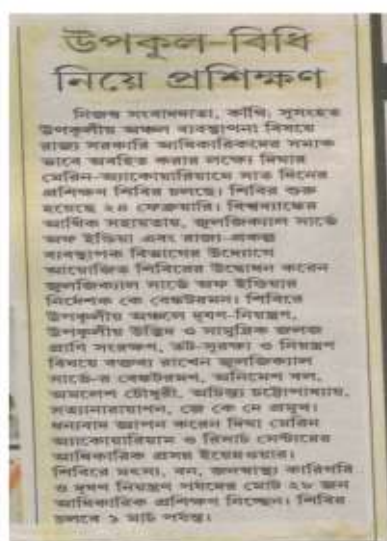
<http://zsi.gov.in/checklist/Tessaratomidae.pdf>

ZSI IN NEWS

A new marine museum to educate and amuse

<http://www.thehindu.com/todays-paper/tp-national/article2890805.ece>

NEWS from WRC/ZSI Pune



News clippings on the inauguration of the First Training programme on Intergrated Costal Zone Management for State Govt. Officials, funded by the World Bank, held at MARC, ZSI, Digha from 24th February to 1st March, 2012, published in the leading Bengali News Papers 'BARTAMAN' (25th February, 2012) and 'ANNANDA BAZAR PATRIKA' (28th February, 2012)

OUT OF THE BOX

New fish species discovered in Manimala River, Kerala

<http://www.thehindu.com/news/states/kerala/article2920272.ece>

Male spiders allow females eat them for kids' sake

<http://www.deccanherald.com/content/214467/content/212274/content/213732/breastfeeding-cuts-obesity-risk.html>

Diversity of Life Snowballed When Ancient Earth Was Frozen Solid

<http://www.livescience.com/17185-snowball-earth-animal-diversity.html>

Did Life Start in a Pond, Not Oceans?

<http://news.discovery.com/earth/life-pond-ocean-122402.html#mkcpgn=emnws1>

PAINTINGS FROM ZSI HERITAGE ALBUM

Rhesus macaque

Macaca mulatta (Zimmermann, 1780)

