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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

Extensive field surveys were undertaken in the States of Himachal Pradesh and Maharashtra. In addition, one survey was conducted in Kerala coast to collect crabs, isopods and stomatopods. One local survey at the Indian Botanic Garden, Kolkata, West Bengal has also been undertaken for the collection of Soil fauna.

During the month, the scientists of Headquarters identified, 4 species of Protozoa, 4 species of Platyhelminthes, 19 species of Hemiptera, 4 species of Hymenoptera, 3 species of Orthoptera, 12 species of Coleoptera, 11 species of Isoptera, 5 species of Crustacea, 43 species of Mollusca, 5 species of Fishes, 4 species of Amphibia and 8 species of Mammals from various states of India.

One new species *Zonorchis sanglaensis* Chakrabarti et al. 2012 (Digenea: Trematoda), has been described.

The Terai Reed Frog, *Polypedates taeniatus* has been recorded for the first time from West Bengal. Eleven marine fishes were recorded for the first time from Tamil Nadu coast which included 4 species for the first time from the east coast of India. Three species of trematodes were identified as new records from Himachal Pradesh.

Holotypes of 5 species of freshwater fishes have been deposited in the National Zoological Collection by Shri. Mathews Plamoottil of Government College, Chavara, Kerala.

Seven research papers were published, 8 papers accepted and 10 communicated.

Identification and advisory services were rendered on 11 lots of specimens, received from different institutions and organizations. In addition, 5 identification services were also rendered.

Shri B.M.S. Rathore, Joint Secretary, MoEF, New Delhi and Dr. Sinha, Director, Wildlife Institute of India, visited different Sections/ Divisions of ZSI, Headquarters on 25th October.

Dr. Gopinathan Maheswaran, Scientist-C, attended the meeting of Sunderban Tiger Conservation Foundation Trust (STCFT). Dr. Animesh Bal, Scientist- F, attended the Review Meeting of ICZM Project in MARC, ZSI, Digha on 3rd October and also the official meeting at MARC, Digha on 18th October with the Consultant, World Bank, for a proposal regarding the renovation of Marine Aquarium under the ICZN Project, funded by the World Bank.

Dr. K. Venkataraman, Director, ZSI attended the XI Conference of Parties (CoP-11) of the Convention on Biological Diversity (CBD) and the interministerial-cum-expert meeting at Hyderabad from 1st-19th October. On this occasion, a series of special publications of ZSI were released by Smt. Jayanthi Natarajan, Hon'ble Minister of State for Ministry of Environment and Forests, Govt. of India [<http://zsi.gov.in/Cop-11/cop-11.html>].

Dr. K. Venkataraman, Director, ZSI, Kolkata and C. Radhakrishnan, Scientist-F, Western Ghat Regional Centre, ZSI, Calicut, attended the second Project Management Committee meeting held on 25th October, 2012 at Headquarters, presided by Dr. Nandita Chatterjee, I.A.S., Additional Secretary, MoEF, Govt. of India, New Delhi. Shri B.M.S., Rathore, Joint Secretary, MoEF, Dr. Sinha, Director, Wildlife Institute of India, Dehra Dun, former Directors of ZSI, Dr. A. K. Ghosh and Dr. J. R. B. Alfred took part in the meeting.

Dr. K. Venkataraman, Director, ZSI also attended the Brainstorming session on DNA Barcoding held on 27th October at the Central Institute of Fisheries Education (C.I.F.E.), Mumbai and delivered a special talk on 'Importance of Taxonomy, Biodiversity, DNA Barcoding and Networking'.

Publications:

1. Shuvajit Chakrabarti, Anindita Ghosh and Venkataraman, K. 2012. A new trematode

- parasite *Zonorchis sanglaensis* n.sp. (Dicrocoeliidae: Dicrocoeliinae) from a bird host *Turdoides straitus orientalis* (Jerdon) from Sangla, Himachal Pradesh, India. *Trends in Par.Res.* 1(2):7-9.
2. Chandra, K. Gupta, D. and Khan, S. 2012. Scarab beetles (Coleoptera: Scarabaeidae) of Kanger Valley National Park, Chhattisgarh (India). *Journal of Ecobiotechnology*, 4(2):69-70.
 3. Chandra, K. and Sharma, R.M., 2012. *Fauna of Ecosystems of India- Deccan Peninsula*. 1-26 (Published by the Director, ZSI, Kolkata).
 4. Chandra, K., Sambath, S and Talmale, S.S. 2012. *Protected Areas of Madhya Pradesh and Chhattisgarh*. 1-22 (Published by the Director, ZSI, Kolkata).
 5. Biswas, S., Mishra, S.S., Das, N.P.I., Nayak, L., Selvanayagam, M. and Satpathy, K.K., 2012. First record of eleven reef inhabiting fishes from Tamil Nadu coast of India, Bay of Bengal. *Proc. Zool. Soc.*, 65(2): 105113 (DOI 10.1007/s12595-012-0042-3).
 6. Biswas, S., Mishra, S.S., Das, N.P.I., Selvanayagam, M., Nayak, L. and Satpathy, K.K., 2012. New records of four reef-associated fishes from east coast of India. *Acta Ichthyologica et Piscatoria*, 42(3): 253-258. (DOI: 10.3750/AIP2011.42.3.10).
 7. Dev Roy, M. K. and Sivaperuman, C. 2012. Mangrove Ecosystem. In: *Fauna of Ecosystems of India*, pp. 1- 11. Special Publication Series on the occasion of CBD Cop-11, 2012. Zoological Survey of India: Kolkata.



Smt. Jayanthi Natarajan, Hon'ble Minister of State, MoEF, New Delhi, releasing the Special Publications of ZSI, during the CBD CoP 11 at Hyderabad



During the second PMC meeting held at ZSI, Kolkata



Dr. K. Venkataraman, Director, ZSI, addressing the participants during the Brainstorming session on DNA Barcoding for Biodiversity Management at C.I.F.E., Mumbai



Enchelynassa canina (Quoy et Gaimard)



Entomacrodus vermiculatus (Valenciennes)



Apogon fleurieu (Lacepède)



Archamia fucata (Cantor)



Polypedates taeniatus (Boulenger)



Cover pages of a Journal and Book published by ZSI

North Eastern Regional Centre, Shillong

During the month, 2 species of Amphibia, 3 species of Reptilia and 7 species of aquatic Hemiptera were identified from the backlog collections of the Centre and 156 examples of identified fishes were registered. In the faunal Database, 190 data of mammals, 44 of fishes, 24 of Aves and 14 of reptiles were entered. Images and metadata of 4 species of Mammalia were digitized.

A paper on *Faunal Diversity of Pangi valley, Himachal Pradesh*, authored by Dr. Uttam Saikia has been accepted for publication in the Himalayan Ecosystem series, ZSI, Kolkata.

Mrs. J. Lyngdoh, Scientist-C attended the 3rd Meeting of the Governing body of the Meghalaya Zoo Project Implementation Society on 5th of October at the Office of the PCCF, Meghalaya, at Shillong.

Ms. Banasree Sharma, a research scholar from the Department of Ecology and Environmental Science, Assam University, Silchar, visited the Centre on 19th of the month and deposited 83 examples of fishes collected from Barak valley for identification service.



A juvenile *Ichthyophis* sp. (Amphibia) collected from Ri-Bhoi district, Meghalaya

Arunachal Pradesh Regional Centre, Itanagar

A field survey was undertaken in East Kameng district of Arunachal Pradesh from 5th-11th October 2012. During the survey, representative faunal samples were collected including zooplankton samples from 7 different rivers and streams of the Seijosa and Seppa areas. Images and metadata of 10 specimens of

identified fishes in the National Zoological Collection were digitised. Shri Lakpa Tamanag of G. B. Pant Institute of Himalayan Environment & Development, North East Itanagar deposited the Holotype of *Pseudolaguvia viriosa* (Pisces: Siluriformes: Erethistidae).

Gangetic Plains Regional Centre, Patna

A field survey was undertaken in Jharkhand covering localities such as Palamu Tiger Reserve (Betla, Maromar, Netrahat) and Hazaribagh, Urvan (Kodarma) from 7th- 16th October. Another field survey was also conducted during the month in selected Protected areas of North Bihar i.e. Valmiki Tiger Reserve in west Champara, Sarayiman Lake (Udaipur Wildlife Sanctuary) in Bettiah, Kusheshwar Asthan in Darbhanga and Gogabil Pakshi Vihar in Katihar from 26th October-4th November. One research paper was published.

Dr. Gopal Sharma, Scientist-C & Officer-in-Charge and Dr. Navneet Singh, Scientist-C attended the 'Dolphin Day', organized by the Department of Forests, Govt. of Bihar, on 5th October. Dr. Gopal Sharma presented a paper on Dolphin Conservation activities at National level in India. He also participated as a panelist for discussion on 'Dimensions of changing river patterns and its effect on living resources' and delivered a lecture on 'Ensuring survival of Gangetic Dolphin, our National aquatic animal in its natural habitat', on 8th October at

Middleton Chambers, Kolkata. The program was organized by WWF-India, Kolkata.

Publication:

Choudhary, D.N., Sharma, G. Singh, A.K.,

Desert Regional Centre, Jodhpur

A field survey was conducted in and around River Chambal covering 31 point locations from 21st September-2nd October. A total of 21 species of fishes, 4 species of amphibians, 16 species of reptiles, 135 species of Aves and 30 species of mammals were identified and recorded along with GPS data, from different localities of the Chambal River. Besides, 12 species of nematodes and 7 species of fishes and 3 genera of ants were identified from Rajasthan. Dr. Padma Bohra, Scientist-D & Officer-in-Charge and Dr. Sanjeev Kumar, Scientist-C attended the Inspection meeting of the Third Sub-Committee of the Committee of Parliament on Official Language pertaining to the Centre on



A view of River Chambal

Western Regional Centre, Pune

During the month, 8 species of crabs, 2 species of Collembola, 7 species of Hymenoptera, 9 species of Odonata, 14 species of Pisces, 3 species of Amphibia and 4 species of Reptilia were identified. Five research papers were published and one communicated. Identification and advisory services were rendered on fishes to a senior research fellow, Dept. of Zoology, R. A. College, Washim,

Rohitashwa, R. & Neetu 2012. Discovery of a new nesting colony of wild painted storks in Danapur cantonment area, Bihar. *Newsletter for bird watchers* 52 (1).

16th October, 2012. Dr. Sanjeev Kumar, Scientist-C delivered lectures on the occasion of Wildlife Week Celebrations organized by the Office of the D.F.O. (Wildlife, SFD), Jodhpur on 3rd October at Guda Bishnoi, Jodhpur, as a subject expert. Besides, Dr. Sanjeev Kumar attended the Wildlife Week Closing and Prize Distribution Ceremony on 7th October at Zoo, Jodhpur, as the Special Guest. Dr. H. S. Banyal, Scientist-C delivered a lecture on the fauna displayed in the museum at the Centre to a group of 18 M.Sc. students and 4 teachers from Kachchh University, Bhuj, Gujarat on 29th October.



Students from Kachchh University, Gujarat, at DRC/ZSI

Maharashtra and to CZRC, ZSI, Jabalpur. One seized animal horn received from the Forest Department, Koyna (Maharashtra) was identified as horn of *Cervus* sp.

Dr. R.M. Sharma, Scientist-D & Officer-in-Charge delivered an invited talk entitled 'The World of Insects' on 1st October, on the occasion of the Wildlife Week celebrations organized jointly by the State Forest Dept., Pune

Municipal Corporation and Nature Walk, an NGO. He also participated, as a member of the expert committee, in a meeting organised to evaluate and declare Critical Wildlife Habitats in Bhimashankar Wildlife Sanctuary, Dist. Pune on 13th & 14th October. Besides, Dr. Sharma attended a meeting convened by the PCCF (Maharashtra) at Nagpur on 18th October. Dr. R. Bano, Scientist-C, attended the Brain Storming session on DNA Barcoding for Biodiversity Management at CIFE, Versova, Mumbai, on 27th of the month.

Publications:

1. Shrikant Jadhav and Sameer Kumar Pati 2012. Fauna of Protected Areas of "Maharashtra" In Special publication series on the occasion of CBD CoP-11, India: 1-20 (Publ. by DZSI, Kolkata).
2. Shrikant Jadhav and Sameer Kumar Pati 2012. Fauna of Protected Areas of "Goa" In Special publication series on the occasion of CBD CoP-11, India: 1-16 (Publ. by DZSI, Kolkata).
3. Pati, S.K. and R.C. Panigrahy. 2012. A Systematic Survey of Molluscan Fauna of Rushikulya Estuary, East Coast of India. *Biosystematica*, 6 (1): 33-38.
4. Pati, S.K. and R.M. Sharma. 2012. *Oziotelphusa ganjamensis*, a new species of freshwater crab (Brachyura: Gecarcinucidae) from south Odisha (Orissa) state, eastern India. *Zootaxa*, 3528: 4956.
5. Moawia E. M, Ensaf. S. I. and R.M.Sharma 2012. First record of *Resseliella salvadorae* (Rao), 1951 (Diptera: Cecidomyiidae) and its parasitoid from stem and leaf galls of *Salvadora persica* L. Sudan. *Journal Threatened Taxa*, 4 (13): 3215-3217.



Oziotelphusa ganjamensis Pati & Sharma- new species



Delta conoideum Gmelin

Estuarine Biology Regional Centre, Gopalpur-on-Sea

A field survey was conducted from 28th September-10th October 2012 in Narmada Estuary, Bharuch District and Tapi Estuary, Surat District, Gujarat, to study the faunal diversity. Field observations and sampling from the estuaries were made during the survey.

Eleven species of bivalve Mollusca were identified from the collections of Pennera Estuary, Nellore, Andhra Pradesh. Thirty people visited the faunal depository at the Centre.



Narmada Estuary, Bhadbhut, Bharuch District, Gujarat



Tapi Estuary, Hazira, Surat District, Gujarat

Freshwater Biology Regional Centre, Hyderabad

The Taxonomic identification studies of wetland faunal collections were continued and 9 species of freshwater fishes, 5 species of rotifers, 9 species of Cladocera, 2 species of copepods and 16 species of Mollusca were identified. Two research papers were published.

Dr. D.V.Rao, Scientist-C & Officer-in-Charge, Dr. Prasanna Yennawar, Scientist-C and Dr. Deepa Jaiswal, Scientist-C, attended the Conference of Parties on Biological Diversity, Eleventh meeting, from 1st-19th October, 2012 at Hyderabad International Convention Centre, Hyderabad. They also attended the International Conference on Natural History of Indian Biodiversity from 4 - 5th October at Salarjung Museum, Hyderabad, organised by the National Museum of Natural History, New Delhi and other side events of CBD CoP-11.

Publications:

1. Kosygin Singh, L. and Rao, D.V. 2012. Fauna of Ecosystems of India-Estuarines: 1-14. (Pub.: Director, ZSI, Kolkata).
2. Subramanyan, K. and Deepa Jaiswal. 2012. Fauna of Ecosystems of India- Freshwater: 1-28. (Pub.: Director, ZSI, Kolkata).



ZSI scientists displaying the special publications of ZSI during the CBD CoP-11

High Altitude Regional Centre, Solan

A field survey was conducted in Kalatop Khajjiar Wildlife Sanctuary, Chamba district, Himachal Pradesh (HP), from 8th-12th October and faunal samples referable to 11 animal groups were collected from different habitats. A local survey in Chail Wildlife Sanctuary, Solan district (HP) has also been conducted on 3rd October. The faunal identification from the Centre includes 2 species of Oligochaeta, 13

species of butterflies and 5 species of Orthoptera from the Kalatop Khajjiar Wildlife Sanctuary. Identification from Spiti Valley Cold desert, Lahul & Spiti district, (HP) includes 1 species each of Oligochaeta and Amphibia. From NRC/ZSI, Dehradun collections, 5 species of Pisces were identified. During the survey tour to Spiti, 26 species of birds and 3 species of mammals were observed. A scientist

from the Centre guided one research scholar from Punjabi University, Patiala, on the taxonomy of the family Nymphalidae (Lepidoptera) from 1st-5th October. A scientist from the Centre delivered an invited lecture on 'Status and diversity of butterflies in trans Himalayas' in the National conference on Man



Patanga japonica (Bolivar)

and Environment, held at Punjabi University, Patiala from 15th-16th October. Dr. A. K. Sidhu, Scientist-C and Officer-in-Charge, prepared and submitted a list of endemic butterflies of India to ZSI, Kolkata in connection with the CBD CoP-11.



Oedaleus abruptus (Thunberg)

Southern Regional Centre, Chennai

A field survey was undertaken in Villupuram & Trichy districts of Tamil Nadu from 27th September-13th October. During the month, 4 species of Odonata, 13 spp. of Mollusca, 10 spp. of Pisces and 3 genera of blattids collected from Southern & Middle Eastern Ghats and Kalakkad

Mundanthurai Tiger Reserve were identified. Two identification and advisory services were rendered. A lecture on the taxonomic perceptive of Ichthyology, fisheries conservation and threats was delivered to the inspectors of Tamil Nadu Fisheries Training Institute, Chennai.

Marine Biology Regional Centre, Chennai

The status of species of sea cucumbers was assessed through diving method in Tuticorin, Vembar group of islands of Gulf of Mannar Marine Biosphere Reserve and an extensive field survey was conducted in Bhitarkanika mangrove ecosystem, Odisha and representative fauna collected. During the month, 1 species of Cnidaria, 4 species of Nematoda and 13 species of Mollusca were identified out of the material collected from Idaikazhinadu (Chennai), Palkbay and Gulf of Mannar Biosphere Reserve. Twenty species were digitized and metadata compiled. Two papers were published and one paper submitted for publication. Dr. C. Venkatraman,

Scientist-C & Officer-in-Charge and Dr. Rajkumar Rajan, Scientist-C, supervised the research projects of SRF's of the Centre

Dr. C. Venkatraman and Dr. Rajkumar Rajan attended and exhibited two posters on 'Corals: New to Indian waters' and 'Sea grass ecosystems of India', during the side event on "Lagoons, Lives & Livelihoods: bridging people & environment through science-policy", jointly organised by the National Centre for Sustainable Coastal Management, Society of Integrated Coastal Management and MoEF during the CBD CoP11 at Hyderabad. Dr. C. Venkatraman also delivered a lecture on 'Wildlife Conservation in India' on the occasion

of the Wildlife Week celebrations, organised by the Queen Mary's College, Chennai and attended the Animal Ethics Committee meeting at GLR laboratories at Madhavaram as a member.

Five species of ornamental fishes were introduced in the marine aquarium. The marine aquarium & museum at the Centre were visited by 962 tourists.

Publications:

1. Sivaleela, G., K. Venkataraman and C. Suresh Kumar. 2012. Status of Soft corals (Alcyonacea) in the Gulf of Mannar, southeast coast of India. pp. 71-78. In: Bhatt, J.R., J.K. Patterson Edward, D.J. Macintosh

and B.P. Nilaratna (eds): *Coral reefs in India: Status, threats and conservation measures*. MFF-IUCN India.

2. Raghunathan, C., R. Rajkumar and Ramakrishna. 2012. Current status of coral reefs in the Andaman and Nicobar islands. pp 29-36. In: Bhatt, J.R., J.K. Patterson Edward, D.J. Macintosh and B.P. Nilaratna (eds): *Coral reefs in India: Status, threats and conservation measures*. MFF-IUCN India.

Poster prepared for CBD CoP11:

Sea grass ecosystems of India

<http://zsi.gov.in/Cop-11/Poster/Seagrass%20Ecosystem%20of%20India.jpg>



A view of Bitarkanika mangroves



Horseshoe crab, *Tachypleus gigas*



Salt water Crocodile *Crocodylus porosus*



Uca sp.

Northern Regional Centre, Dehra Dun

A field survey was conducted in Dehradun district for the collection of Butterflies for molecular characterization studies. DNA of 3 species of nymphalid butterflies were extracted by Phenol-Chloroform Method. During the

month, the following fauna were identified: 13 species of Acridoidea from Dehradun district, 2 species of soil nematodes from Govind WLS & NP, Uttarakhand, and 3 species of reptiles from Sultanpur Bird Sanctuary & NP. Permanent

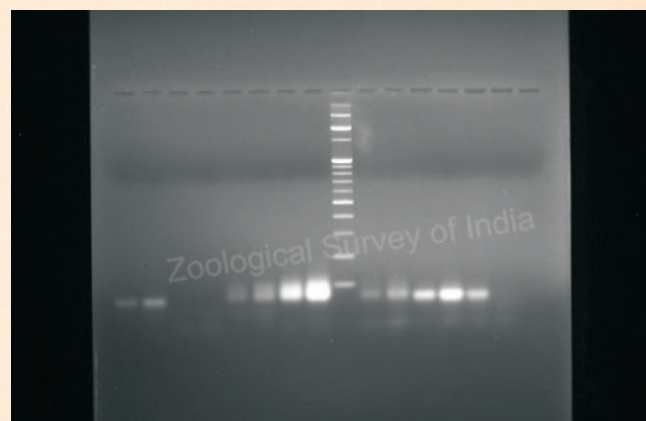
slides of soil nematodes for morphological studies were prepared and photographs and measurements of 10 species of soil nematodes completed. The final report on the Trichotaxonomy of Lagomorpha was submitted. Ten species of Pisces were digitized, 20 entries of Lepidoptera and 9 of soil nematodes made in the Invertebrate database.

Dr. A. N. Rizvi, Scientist-C, delivered an invited lecture on "Molecular Taxonomy & DNA Barcoding" to B.Sc. and M.Sc. students of the Dolphin (PG) Institute of Biomedical and Natural Sciences, Manduwala, Dehradun, on 20th October. Dr. Archana Bahuguna, Scientist-C, delivered an invited lecture on Trichotaxonomy and Molecular Biology as techniques for wildlife forensic studies in the National Workshop on Taxonomic keys and identification of different groups of flora and fauna, organized by the Dept. of Zoology and Environment Sciences at Gurukul Kangri University, Haridwar.

Two faculty members and 22 students of DDU Gorakhpur University visited the Museum at the Centre.

Publication:

Bahuguna, A. 2012. Global Warming ka sarisarpon par prabhav, *Vigyan Paricharcha*, 2(4) April-June (Article in Hindi).



The GEL Photo- WITH AMPLICON- of 12s rRNA gene and DNA 100bp ladder from the hair and skin samples of fishing cat, *Prionailurus viverrinus*

Andaman and Nicobar Regional Centre, Port Blair

Marine and terrestrial ecosystems of Outram, Henry Lawrence, John Lawrence, Inglis, Wall and Havelock Islands in Ritchie's Archipelago and Elizabeth Bay in North Andaman were surveyed from 10th-15th October and 24th-26th October 2012 respectively, to assess the faunal communities. As a result of the surveys, 73 species of corals, 3 species of sponges, 4 species of polyclads, 31 species of echinoderms, 27 species of nudibranchs, 52 species of gastropods, 2 species of bivalves, 15 species of fishes and 1 species of pilot whale were identified from the marine habitat, while 5 species of odonates, 18 species of butterflies, 5 species of amphibians, 4 species of reptiles and 51 species of birds were identified/observed from the terrestrial habitat. Among the scleractinian corals, *Acropora turaki* Wallace, 1994, and *Lobophyllia dentatus* Veron, 2000 and Nudibranchs *Chromodoris joshi* Gosliner & Behrens, 1998 and *Mexichromis mariei* (Crosse,

1972) were new to Indian waters. A total of 127 specimens comprising of 1 specimen of sponge, 17 specimens of echinoderms, 95 specimens of scleractinian corals, 10 specimens of butterflies and 4 specimens of reptiles were registered in the National Zoological Collection. Mass stranding of 40 individuals of short-finned pilot whale *Globicephala macrorhynchus* Gray, 1848, was recorded in Elizabeth Bay at North Andaman Coast. Among the stranded whales, 18 were males and 22 females. Morphometric data of the stranded whales was collected. Four live specimens of confiscated Water Monitor Lizard *Varanus salvator* (Schedule - 1 under Wildlife Protection Act, 1972) were identified for Range Officers, Department of Environment and Forests, A&N Administration. A report on 'Rapid Environmental Impact Assessment for Runway Extension at Campbell Bay' has been submitted to Indian Navy, Port Blair. The technical report of grant-in-aid project 'Faunal

Diversity of Great Nicobar Biosphere Reserve' has also been submitted to administrative Ministry. Books on 'Polyclads of Andaman and Nicobar Islands', 'Agaraciids of Andaman Nicobar Islands' and a manuscript on 'Mass stranding of pilot whales in Andaman coast' have been submitted for publication. Mr. Koushik Sadhukhan, SRF, delivered a lecture entitled 'Conservation of Endangered Species' on 4th October at the 58th Wildlife Week Celebration of the Department of Environment and Forests; Mr. S. Rajesh Kumar, JRF, made two presentations on 'Avifaunal diversity of Andaman and Nicobar Islands' on 5th and 6th October, organized by the CPR Foundation, Chennai, held at Port Blair. Dr. C. Sivaperuman, Scientist-C attended the 3rd 'Indian Landslide Congress on Natural Hazards and Coastal Environment: A roadmap to Andaman and Nicobar Islands', held at Port Blair on 4th of the month. Dr. C. Raghunathan, Scientist-C and Officer-in-Charge attended the 58th Wildlife Week meeting on 3rd and 8th October, organized by the Department of Environment and Forests, A&N Administration. He also attended the 3rd Indian Landslide Congress on 4th October.

Publications:

1. Koushik Sadhukhan and C. Raghunathan. 2012. Four new records of Ophiuroids (brittle star) from Andaman and Nicobar Islands. *Middle East Journal of Scientific Research*, 12 (2), 274-281.



Mass stranding of Pilot Whale,
Globicephala macrorhynchus Gray

2. Tamal Mondal, C. Raghunathan and K. Venkataraman. 2012. New Distribution Report of Eight Scleractinian Corals to Indian Water from Andaman & Nicobar Islands. *Advances in Biological Research*, 6(3): 110-120.
3. Tamal Mondal, C. Raghunathan and K. Venkataraman. 2012. New Distribution Report of Ten Scleractinian Corals to Indian Water from Andaman & Nicobar Islands. *Research J. Science and Tech.*, 4(4):152-157.
4. Dev Roy, M.K. and C. Sivaperuman, 2012. Fauna of Ecosystems of India Mangroves. Published by the Director, Zoological Survey of India, Kolkata (CoP-11 special publication series), 11p.
5. Sivaperuman, C. and C. Raghunathan, 2012. Fauna of Protected Areas of Andaman and Nicobar Islands. Published by the Director, Zoological Survey of India, Kolkata (CoP-11 special publication series), 26 p.

Posters prepared for CBD CoP 11:

1. Corals
<http://zsi.gov.in/Cop-11/Poster/CORAL.pdf>
2. Corals New record to India (Acroporidae)
[http://zsi.gov.in/Cop-11/Poster/Corals%20New%20record%20to%20India%20\(Acroporidae\).pdf](http://zsi.gov.in/Cop-11/Poster/Corals%20New%20record%20to%20India%20(Acroporidae).pdf)
3. Corals New Record to India (Fungiidae)
[http://zsi.gov.in/Cop-11/Poster/Corals%20New%20record%20to%20India%20\(Fungiidae\).pdf](http://zsi.gov.in/Cop-11/Poster/Corals%20New%20record%20to%20India%20(Fungiidae).pdf)



Coral, *Leptoria phrygia* Ellis and Solander



Croal, *Platygyra sinensis* Milne Edwards & Haime



Nudibranch, *Chromodoris joshi* Gosliner & Behrens



Nudibranch, *Halgerda stricklandi* (Fahey & Gosliner)



Nudibranch, *Phyllidiopsis krempfi* Pruvot-Fol



Nudibranch, *Reticulidia suzannae* (Valdes & Behrens)

Central Zone Regional Centre, Jabalpur

A field survey was undertaken from 27th September-12th October in 3 districts of Madhya Pradesh (Chhindwara, Betul and Hoshangabad), for the study of small mammals. During the month, 15 species of Lepidoptera (moths) from Betul, Chhindwara and Hoshangabad districts of Madhya Pradesh were identified and registered. Identification and advisory service was rendered to the State

Forest Research Institute, Jabalpur, on faunal samples collected from localities in and around Sanjay Gandhi Thermal Power Plant, Birshinghpur, (Umaria) area with reference to a study on Environmental Impact Assessment on aquatic fauna. Three research papers were published and two were accepted.

Publications:

1. Kailash Chandra, Sambath, S. and Talmale,

- S.S. 2012. Protected Areas of Madhya Pradesh and Chhattisgarh: 1-22. Special Publication Series on the occasion of CBD CoP- 11, 2012, India (published by the Director, Zoological Survey of India, Kolkata).
2. Kailash Chandra, Sandeep Kushwaha, Biswas, B., Paramita Mukherjee and Animesh Bal. 2012. Eight New Records of



Scotophilus heathii (Horsfield)

Genus *Acanthaspis* (Hemiptera: Reduviidae) from Madhya Pradesh, India. *World Journal of Zoology*.7 (3): 226-231, 2012.

3. Kailash Chandra, Devanshu Gupta and Salma Khan. 2012. Scarab beetles (Coleoptera: Scarabaeidae) of Kanger Valley National Park. *Journal of Ecobiotechnology*, 4(2): 69-70.



Funambulus palmarum robertsoni Wroughton



Funambulus pennantii Wroughton

Sunderban Regional Centre, Canning

4 species of Acrididae and 1 species of Gryllidae (Orthoptera: Insecta) were identified and registered during the month. Dr. Ravi, Assistant Professor, Annamalai University, Chidambaram,

Tamil Nadu, along with his research scholars visited the Centre for Library reference and study of museum specimens.

Marine Aquarium cum Regional Centre, Digha

A survey of the Odisha coast was undertaken and representative faunal elements collected. The aquarium received an average of 2050 tourists per day during the Durga Puja festival. During the month, around 233 examples of live marine ornamental exhibits were collected for exhibiting in the aquarium galleries. The major attractions among the aquarium exhibits during the month were the bat fish (*Platax teira*), lion fish (*Pterois miles*) and surgeon fish (*Acanthurus tristis*). In total 83 specimens were identified during the month which includes 37 species of fishes. Among the fishes identified, *Haplogeny filamentosus* (Iwatsuki & Russell,

2006) forms the record from Indian waters and this species is only known by its type specimen. Also *Carangoides armatus* (Rüppell, 1830), *Epinephelus coeruleopunctatus* (Bloch, 1790) and *Pristipomoides multidens* (Day, 1871) were recorded for the first time from West Bengal coast.

Dr. Hsuan-Ching Ho, National Museum of Marine Biology & Aquarium, Pingtung, 944, Taiwan, donated 9 specimens of Lophiiformes fishes to the Centre.

Dr. Anil Mohapatra, Scientist-C and Officer-in-Charge attended the review meeting of ICZM Project on 3rd October in Kolkata & CBD COP-11 at Hyderabad from 15th-16th of the month.

*Carangoides armatus* (Rüppell)*Hapalogenys filamentosus* (Iwatsuki & Russell)*Epinephelus coeruleopunctatus* (Bloch)*Pristipomoides multidens* (Day)

Western Ghat Regional Centre, Kozhikode (Calicut)

A new genus and new species (*Neoduta serrata*) of Scelioninae (Hymenoptera: Platygasteridae) were described during the month. Other Taxonomic identifications conducted during the month include 4 species of Pteromalidae (Hymenoptera), 3 species of Mantodea, 5 genera of Ceraphronoidea (Hymenoptera), 4 species of Centipedes (Chilopoda) and 2 species of Reptilia. Besides, 7 species of Pteromalidae (Hymenoptera) were also identified from the collections received from Dr. Sudhir Singh, Forest Research Institute, Dehra Dun.

A field survey tour to Southern Western Ghats ecosystems of Kollam and Thiruvananthapuram districts was conducted from 9th-19th October and representative fauna collected from Neyyar, Peppara and Shenduruney Wildlife Sanctuaries.

Nine publications were brought out and 3 research papers were communicated by the scientists of the Centre during the month.

Two identification & advisory services were rendered.

The research document submitted by the Centre on the fauna of Bhadra Wildlife Sanctuary, Karnataka, was revised and re-submitted based on referee's comments. A faunal document entitled 'Fauna of Achanakmar Amarkantak Biosphere reserve, Chhattisgarh and Madhya Pradesh' was reviewed and comments offered.

C. Radhakrishnan, Scientist-F & Officer-in-Charge visited ZSI, Kolkata, from 23rd to 27th October and attended the Project Management Committee Meeting with the Addl. Secretary and Jt. Secretary from the Administrative Ministry, as a member of the Committee, on 25th of the month.

Laboratory facilities were provided to Dr. Hema Kulkarni, Asst. professor, Bhilai Mahila Maha Vidyalaya, Bhilai, Chhattisgarh, who

visited the Centre from 22nd-26th October, to study her Chalcidoidea (Hymenoptera) faunal collections, in consultation with Prof. T. C. Narendran, Coordinator, AICOPTAX (Hymenoptera), at WGRC/ZSI, Calicut.

Dr. P. M. Sureshan, Scientist-C, supervised the research project of a JRF and Dr. K. Rajmohana, Scientist-C, supervised the research projects of the two JRFs of the Centre.

During the month, 618 visitors paid their visits to the museum.

Publications:

1. K. Rajmohana and C. Bijoy, 2012. Cybertaxonomy: A novel tool in Biodiversity Science. In *Biodiversity: in Utilization, Threats and Cultural Linkages*, Edited by A. Biju Kumar, M.P. Nayar, R.V. Varma and C.K. Peethambaran, Narendra Publishing House. Pages 55-64.
2. Rajmohana K and Abhilash Peter, 2012. On a new genus and species of Scelioninae (Hymenoptera: Platygasteridae) from India. *Biosystematica*, 2012, 6(1): 19-25.
3. C. Radhakrishnan and Rajmohana K, 2012. *Fauna of Ecosystems of India, Western Ghats*. 1-14. (Published by the Director, ZSI, Kolkata). Special Publication Series on the occasion of CBD Cop-11, 2012.
<http://zsi.gov.in/Cop-11/Ecosystem/Western%20Ghat%20Ecosystem%20booklet-ZSI%20for%20CoP-11,%20Hyderabad.pdf>
4. Rajmohana, K and Bijoy, C., 2012. A checklist of Diapriidae and Proctotrupidae (Hymenoptera: Insecta) from India.

http://zsi.gov.in/checklist/Diapriidae%20and%20Proctotrupidae_Hymenoptera%20Insecta.pdf

5. M. Gnanakumar, K. Rajmohana, C. Bijoy, D. Balan and R. Nishi, 2012. Diversity of Hymenopteran Egg Parasitoids in Organic and Conventional Paddy Ecosystems. *Tropical Agricultural Research* Vol. 23 (4): 300-308.
6. Emiliyamma, K.G. and Muhamed Jafer Palot. 2012. *Fauna of the Protected Areas of Western Ghats*: 1-14. (Published by the Director, ZSI, Kolkata). Special Publication Series on the occasion of CBD Cop-11, 2012.
<http://zsi.gov.in/Cop-11/Protected%20Areas/WG%20booklet.pdf>
7. Muhamed Jafer Palot. 2012. Butterfly Migration studies in Kerala An Overview. *Papilio*. A newsletter of Department of Zoology, Sir Syed College, Taliparamba. Vol.1. October 2012. Pages: 3-7.
8. Muhamed Jafer Palot. 2012. Butterfly migration studies in Kerala part of Western Ghats An Overview. In: *Biodiversity and Taxonomy*, Pages: 133-144. Edited by Bujukumar, A., Nayar, M. P., Varma R. V. and C. K. Peethambaran. Narendra Publishing House. Pages 55-64.
9. K. P. Dinesh, C. Radhakrishnan, K. V. Gururaja, K. Deuti and G. Bhatta. 2012. A checklist of Amphibia of India with IUCN Red list Status. Pp.1-17.
http://zsi.gov.in/checklist/Amphibia_final.pdf



Female and male of *Neoduta serrata* Rajmohana and Abhilash Peter
New genus and new species described (Insecta: Hymenoptera: Platygasteridae)

Lestes elatus Hagen in Selys
Odonata: Lestidae



Bradinopyga geminata (Rambur)
Odonata: Libellulidae



Pachyneuron aphodis Bouceh
Hymenoptera: Pteromalidae



Anisopteromalus calandrae (Howard)
Hymenoptera: Pteromalidae

ANIMAL OF THE MONTH

Golden Mahseer

Tor putitora (Hamilton-Buchanan)



[Text & Photo: Indu Sharma, HARC/ZSI, Solan]

The golden Mahseer, *Tor putitora* (Hamilton-Buchanan), is one of the most important food and game fish having a wide-range of distribution in the mid hill stretches of the Himalayan region (Darjeeling to Kashmir). It is a natural inhabitant of the rapid streams with rocky bottom, deep pools of water and lakes. The fish inhabits suitable habitats in moderate altitudinal range (350-2000 m ASL) and as well survive in the clear running, oxygenated water with temperature varying from 10 to 30°C. It migrates from lower to torrential middle up-

streams for breeding during the monsoon. It is omnivorous in its feeding habits and fingerlings are mainly insectivorous. It plays an important role in controlling the aquatic macrophytes. The fish is mainly characterized by its large scales and is bigger than any cyprinids. Body is elongated, stout deep and head is larger than the depth of body. Lips are thick, continuous and the lower with a median fleshy lobe. Barbels are two pairs and well developed. Body colour is brownish with golden yellow tinge. Pectoral, ventral and anal fins are yellowish.

This fish is the hardest among the fresh water sport fishes. Anglers like its sporting power and fighting qualities during angling. Hence the fish, due to its sporting qualities, is known as tiger fish of the rivers.

Construction of dams in Himalaya has affected

the migration of the fish and consequently its breeding. The fish is under severe threat due to loss of habitat, overfishing, poaching and other anthropogenic factors. The species is categorized as endangered by IUCN and CAMP (1998).

OUT OF THE BOX

Mobile Towers Affecting Wildlife: Environment Ministry

<http://news.outlookindia.com/items.aspx?artid=771601>

PAINTINGS FROM ZSI HERITAGE ALBUM

Mugger Crocodile

Crocodylus palustris Lesson, 1831

