

ZSI e-NEWS

The Monthly Electronic Newsletter of Zoological Survey of India

Volume - 03 :: Number - 05

May 2011



ZSI e-NEWS

Back issues of *ZSI e-NEWS*

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Headquarters, Kolkata

Extensive field surveys were undertaken in the coasts of Orissa and Andhra Pradesh. Local surveys were carried out in and around wetland areas (Bortibeel) of North 24 Parganas, West Bengal.

During the month, two species of parasitic wasps, *Torymoides binduae* Narendran and Girish Kumar and *Torymoides taruni* Narendran and Girish Kumar (Hymenoptera: Torymidae) have been described as new to science.

Out of the material studied, Bee flies (Diptera: Bombyliidae), *Bombylella albosparsus* Bigot, *Bombylius (Bombylius) terminalis* (Brunetti) and *Micomitra vitrea* (Bigot) are reported for the first time from Karnataka; *Bombylius major* Linnaeus from Punjab and Uttarakhand; *Ligyra aurantiaca* GuerinMeneville and *Ligyra semifuscata* (Brunetti) from Madhya Pradesh and Chhattisgarh; *Heteralonia (Isotamia) insulata* (Walker) from Chhattisgarh and *Litorhina lar* (Fabricius) from Punjab are reported for the first time from the state mentioned.

Two species of Diptera, *Hilara peshawarensis* Brunetti (Diptera: Empididae) and *Themara hirtipes* Rondani (Diptera: Tephritidae) turned out to be new records to the States of Himachal Pradesh and Kerala, respectively. A specimen of *Zenopsis conchifer* (Lowe) (Pisces: Zeidae) has been collected for the first time from Tamil Nadu coast (Tuticorin).

During the month, Scientists of Headquarters identified, 3 species of Protozoa, 4 species of scleractinian corals, 1 species of Brachiopoda, 1 species of Bryozoa, 12 genera of nematodes, 2 species of earthworms, 4 species of Collembola, 21 species of Coleoptera, 5 species of Diptera, 10 species of Hemiptera, 3 species of Hymenoptera, 8 species of Isoptera, 7 species of Lepidoptera, 4 species of Odonata, 15 species of spiders, 2 species of Crustacea, 25 species of Mollusca and 5 species of Amphibia from the States of Andhra Pradesh, Himachal Pradesh,

Jharkhand, Orissa, Tamil Nadu, Uttar Pradesh and West Bengal. Apart from these, Reduviidae and Pentatomidae bugs (Hemiptera) of Kanyakumari Wildlife Sanctuary, received from the Southern Regional Centre, Chennai, have also been identified.

Studies on Animal fossils of Nagaland were carried out by scientists of Headquarters; the inventorisation and updating of records revealed at least 133 species of invertebrate animal fossils (viz., Protozoa: 19 species of Foraminifera and 41 species of Radiolaria; Mollusca: 25 species of Gastropoda and 48 species of Bivalvia). About 9 species of Gastropoda and 32 species of Bivalvia are recorded for the first time from Nagaland.

Identification and advisory services were rendered for sixteen lots of specimens, received from different Institutions and Organizations. Specimens of Crabs and Molluscan shells received from Mr. Safiqul Islam, Asst Professor, Institute of Marine science and Fisheries, Bangladesh were identified. Digital photos of Amphibians of West Bengal sent by Prof. A.K. Sou, Kulti College, Bardhaman, West Bengal were also identified.

A sample of seized animal tail received from D.F.O., Jalpaiguri Division, West Bengal, was identified as that of the Barking Deer, *Muntiacus muntjak* (Zimmermann) and three samples of flat skins received from Mr. Sudhannya Mallick, Inspector of Police, C.I.D., West Bengal, were confirmed as that of the Spotted Deer, *Axis axis* (Erxleben). Ten examples of sea shells received from Delhi Police as seized materials were identified and report submitted.

During the month, six research papers were published, twenty nine papers were accepted and nineteen papers submitted for publication.

Dr. Nasreen S. Haque, Asstt. Professor, New York City College of Technology, City University, New York; Md. Shafiqul Islam,

Asstt. Prof. & Ph.D. Researcher, Institute of Marine Science & Fisheries, University of Chittagong, Bangladesh; Mrs. Mithila Das, Lecturer in Zoology, S.N. College, Rajkanika, Dist. Kendrapara, Odisha; Mrs. Arunima Bajpayee, SRA, Central Pollution Control Board and research scholars from Vidyasagar University, Medinipur and Calcutta University, Kolkata visited different sections of the Headquarters for studying the faunal collection.

Shri S. R. Joy, Library Information Asst. attended a National Seminar on "Information and Knowledge Dissemination: Present Status and Future Direction (IKD-2011)", held at Central Glass and Ceramic Research Institute, Kolkata, from 6th -7th.

Dr. A.K. Sanyal, Scientist-F, Dr. Kailash Chandra, Scientist-F, Dr. Dhriti Banerjee, Scientist-C, Dr. B. H. C. K. Murthy, Scientist-C, Dr. K. A. Subramanian, Scientist-C, Dr. Basudev Tripathy, Scientists-C, Dr. G. P. Mandal, Scientist-C, Dr. Shelly Acharya, Scientist-C, Shri Bulganin Mitra, Scientist-B and Shri Rati Ram Verma, Publication Production Officer, participated in the meeting of the "Stakeholders' consultation and Launch of United Nations Decade on Biodiversity for Asia & Pacific", organized by the Ministry of Environment & Forests, at New Delhi on 23rd May 2011.

Dr. A.K. Sanyal, attended a meeting on "Expert level consultation for Establishment of a Network of Long-term Ecological Observatories

(LTEO)", held at New Delhi, on 25th.

Dr. K.A. Subramanian, participated in the Biodiversity Day celebration, organised by the West Bengal State Biodiversity Board on 21st at Kolkata and also reviewed a manuscript for a Journal.

The Training and Extension Division, of the Headquarters celebrated the "International Biodiversity Day-2011" in collaboration with Shree Sarada Ashrama Balika Bidyalaya, New Alipore, at the School premises on 24th May. Dr. K. Venkataraman, Director, ZSI presided over the function and delivered a lecture on the importance of our biodiversity to the school students. Smt. Ranjana Mondal, Teacher-in-Charge, Dr. A. K. Sanyal and Dr. Kailash Chandra, also delivered lectures on different aspects of biodiversity. A leaflet on biodiversity brought out in Bengali and English was also distributed among the students. Students participated in the Quiz contest on 'Biodiversity' and prizes were distributed to the winners of the contest. During this occasion a sapling was planted by the Director, ZSI in the school campus.

Dr. K. Venkataraman, Director, Zoological Survey of India attended the following meetings: the 227th Annual Meeting and Award Ceremony of Asiatic Society, Kolkata on 2nd; delivered a lecture on "Forest Biodiversity", at the celebration of International Day for Biological Diversity, organized by Uttar Pradesh State Biodiversity Board, Lucknow on



Torymoides binduae Narendran and Girish Kumar



Torymoides taruni Narendran and Girish Kumar

22nd; the meeting of the “Stakeholders' consultation and Launch of United Nations Decade on Biodiversity (UNDB) for Asia & Pacific”, organized by Ministry of Environment & Forests, in New Delhi, on 23rd; delivered a lecture on “Aquatic Biodiversity” in the Mini-Symposium, organized by Central Institute of Fisheries Education, Mumbai, as part of their Golden Jubilee Celebration.

Publications:

1. Ghosh, S., Ghosh, P. and Mitra, B. 2011. On a collection of aquatic beetles from Bhibhutibhusan Wildlife Sanctuary, West Bengal. *Bugs R All, Newsletter*, 17: 9-10.
2. Ghosh, S., Ghosh, P. and Mitra, B. 2011. A Preliminary report on the predaceous diving beetles (Dytiscidae: Coleoptera) of Binsar Wild life sanctuary, Uttarakhand. *Bugs R All, Newsl.*, 17: 19-20.
3. Havaskary, M., Mitra, B., Sakenin, H., Samin, N., Imani, S., and Rafiee, A. 2011. On a collection of Bee flies (Bombyliidae: Diptera) from Iran. *Journal of Biological Control* 25 (1): 5-10.
4. Mitra, B. 2011. New Distributional records of some bee-flies of India. *BIONOTES*, 13 (1): 35.
5. Narendran, T.C., Girish Kumar, P. and Gantait, V.V. 2010. A revision of the Indian species of genus *Torymoides* Walker (Insecta: Hymenoptera: Chalcidoidea: Torymidae). In: *Advancements in Invertebrate Taxonomy and Biodiversity* (Ed. Gupta, R.K.), pp. 289-300. Agro Bios (International), Jodhpur, India.

6. Thakur, M.L., Mattu, V.K., Paliwal, R., Mehta, H.S. and Thakur, V. 2008. Birds of Shahnahar Reservoir, Kangra, Himachal Pradesh. *Ann. Forest.*, 16 (1): 129-151 (published during 2010).



Zenopsis conchifer (Lowe) (Family Zeidae)
collected from Tuticorin, Tamil Nadu



Scientists of ZSI with dignitaries of the “Stakeholders' Consultation and launch of United Nations Decade on Biodiversity (UNDB) for Asia and Pacific”, a meeting organised by MoEF, at New Delhi, on 23rd May 2011

Desert Regional Centre, Jodhpur

During the month, 4 species of Nematodes, 6 species of Lepidoptera and 3 species of Pisces were identified from various environs of Rajasthan. An Inter-School Quiz Competition on Zoology was held at the Centre on 20th May. Dr. Gaurav Sharma, Scientist-C, attended the “Stakeholders' Consultation and launch of United Nations Decade on Biodiversity (UNDB) for Asia and Pacific”, organized by the

MoEF, at New Delhi on 23rd May and also visited the Entomology Division, IARI, New Delhi, to study their lepidopteran reference collection, on 24th May. Dr. Gaurav Sharma and Dr. Sanjeev Kumar, Scientist-C, attended the “Intellectual Property Rights (IPR) Workshop”, organized by the Patent Information Centre (PIC), DST, Jaipur in collaboration with AFRI, Jodhpur on 25th. Dr. Gaurav Sharma, acted as an

external expert during the pre-synopsis presentation of a research scholar on the Butterfly diversity of Sasan Gir National Park of Gujarat, at the Arid Forest Research Institute, Jodhpur, on 26th. Identification service was provided to a Senior Scientist, Directorate of Medicinal and Aromatic Plants Research Institute (ICAR), Boriavi, Anand, Gujarat on the

identification of 3 species of Lepidoptera. Two research papers were submitted for publication in a National Journal. 324 entries of identified fauna were made in the faunal Database of the Centre. 54 entries pertaining to the books in the Centre's library was made employing the software, 'e-granthalaya'. 142 visitors visited the Museum.



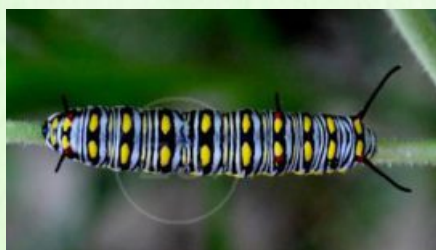
A view of Mount Abu Wildlife Sanctuary



A view Sariska Tiger Reserve



A view of Keoladeo National Park

Spotted Deer, *Axis axis*Blue bull, *Boselaphus tragocamelus*Crimson Marsh Glider Dragonfly,
Trithemis auroraCaterpillar, Pupae & Adult of *Euploea core*Caterpillar, Pupae & Adult of *Danaus chrysippus*

Caterpillar, Pupa & Adult of *Papilio demoleus*

Freshwater Biology Regional Centre, Hyderabad

During the month, 9 species of fishes, 6 spp. of aquatic insects and 7 spp. of fresh water rotifers were identified out of the faunal collection obtained from Palair Lake. On the limnological studies on Kolleru Lake, the chapter on malaco fauna is under finalisation. Under the programme on the ecological studies of the semi urban and urban fresh water aquatic ecosystems, the cyclomorphic forms in 4 species of the genus *Brachinous* (*B. calyciflorous*, *B. quadridentata*, *B. forficula* and *B. falcatus*) were studied for observations on cyclomorphic and seasonal changes in the plankton group, besides the species under the genera *Platyias* and *Keratella*. The manuscripts on the faunal studies



A flock of Black winged stilts, *Himantopus himantopus* (Linn.) resting in the shallow waters of Kolleru lake
(photo: Anand Kumar. A)

of Brahmani - Baitrani estuarine complex, Nuanani Estuary, Odisha; Cauvery Estuary, Puducherry, Tamil Nadu are under finalisation. Four research papers were communicated. Taxonomic literature on aquatic insects and also access to the identified aquatic insect collections of lakes around Hyderabad, were provided to an Asstt. Professor, of the Dept. of Zoology, Ahmednagar College, Ahmednagar (Maharashtra), for his research purposes. The Centre Participated in the *International Biodiversity Day* Exhibition organized by the Andhra Pradesh Forest Department, Biodiversity, Board, National Biodiversity Authority, and National Agricultural Innovation Project (ICAR), at the Jubilee Function hall, Public Gardens, Hyderabad on 22nd. The Centre's research activities and also the ZSI publications were showcased on the occasion.



Sri. S. Vijaya Rama Raju, Hon'ble Minister for Forests, Government of Andhra Pradesh, and other dignitaries viewing the ZSI publications displayed during the Exhibition organised at Hyderabad on the International Biodiversity Day

High Altitude Regional Centre, Solan

During the month, two research papers were published and one paper was submitted. A research paper was reviewed and comments offered. Dr. Anil Kumar, Scientist-C presented

a paper in the National conference on "Biodiversity vis-à-vis Environmental degradation in Hilly Terrains", held at the Dept. of Zoology, DBS (PG) College, Dehradun, from

15th-16th. A group of University and college teachers from the Academic Staff College, Himachal Pradesh University, Shimla, visited the Centre on 13th May and Dr. Indu Sharma, Scientist-C delivered a talk on "Biodiversity, Man and Environment" to them. Dr. Avtar Kaur Sidhu, Scientist-C and Officer-in-Charge attended the meeting of the 'Stakeholders' Consultation and Launch of the United Nations Decade on Biodiversity for Asia and Pacific' organized by the Ministry of Environment and Forests at New Delhi on 23rd May.

Publications

1. Kumar, Anil (2011): Pong dam wetland and Zoological Survey of India *Current Science* 100(10):1464.

2. Sidhu, Avtar Kaur (2011): Biology of common silverline *Spindasis vulcanus* (Fabricius) (Theclinae: Lycaenidae: Papilionoidea) *Journal of Entomological Research* 34(4):337-339.



Trainees of the Academic Staff College, H. P. University, Shimla interacting with the Scientists of the Centre

Marine Biology Regional Centre, Chennai

Scientists of the Centre imparted taxonomic training on Protozoa, Marine Sponges, Meiofauna, Corals and Amphibians to M.Sc Zoology students of the University of Madras during their internship programme. Two species of gorgonids and crustaceans and 5 species of nematodes & fishes were identified and registered during the month, out of the material collected from the recent survey tour to the Gulf of Mannar Marine Biosphere Reserve. A research manuscript was reviewed for a

journal and comments offered. A research paper was submitted for publication. Dr. Rajkumar Rajan, Scientist-C, attended the meeting of the "Stakeholders' consultation and launch of the United Nations Decade on Biodiversity (UNDB) for Asia and Pacific", organized by MoEF at New Delhi.

Eight species of ornamental fishes were introduced in the marine aquarium at the Centre. Two hundred and ninety six tourists visited the marine aquarium.



Sympodium - soft coral



Desmodora (Desmodorella) tenuispiculum

Northern Regional Centre, Dehra Dun

One intensive survey was undertaken in Jhilmil Jheel Conservation area and three intensive surveys were undertaken in the Dehradun district and representative fauna belonging to 13 faunal groups were collected, besides observing 30 species of birds and 3 species of mammals.

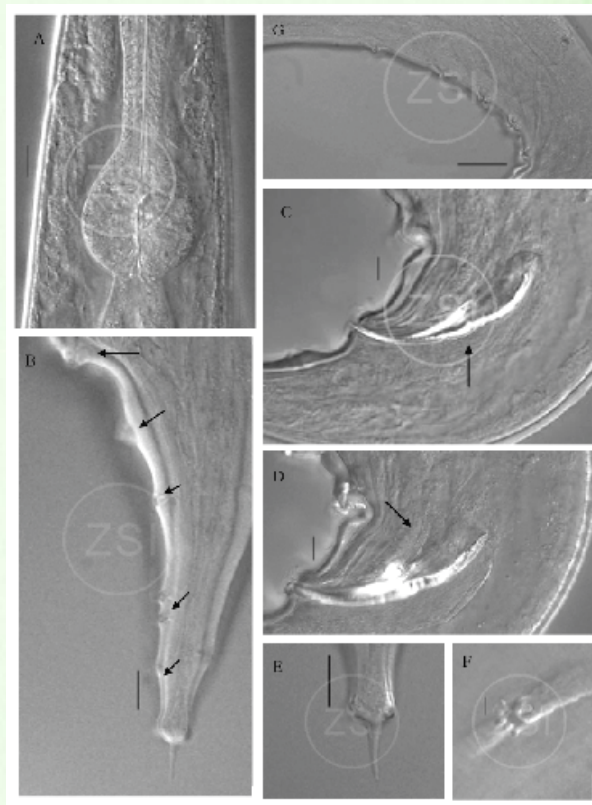
A new species of nematode, *Cosmocerca kalesari* sp. nov. in *Euphlyctis cyanophlyctis* (Amphibia) has been described from Kalesar National Park, Haryana.

Dr. Vinod Khanna delivered a guest lecture on the "Status of Faunal Diversity in Uttarakhand State: A Review" in the National seminar on "Biodiversity viz-a-viz Environmental Degradation in Hilly Terrains", organised by DBS (PG) College, Dehra Dun from 15th-16th; Dr. A. N. Rizvi, Dr. Archana Bahuguna, Dr. Narendra Sharma and Dr. Vinita Sharma presented papers, and Dr. P.C.Tak & Shri J. P. Sati acted as rapporteurs during the seminar. Dr. Rizvi provided guidance on the techniques for fixation & preparation of permanent slides of Entomopathogenic Nematodes to a Ph.D. student from the Forest Extension Division, Tropical Forest Research Institute, Jabalpur from 10th-16th. Dr. Vinita Sharma delivered a lecture on "Nematode relation in forestry", during the training course of the Scientists and Research Officers of ICFRE, Dehra Dun on 18th. Dr. A. N. Rizvi, attended the meeting of the "Stakeholders' Consultation and Launch of the United Nations Decade on Biodiversity (UNDB) for Asia & Pacific", at New Delhi on 23rd May. Dr. Archana Bahuguna supervised two B.Sc. students of DPMC on the project "Analysis of Water of Guchupani".

A unit of the Compact Insect Storage System was installed at the Centre.

Publication:

Rizvi A. N., Bursey C. R. & Bhutia P. T. (2011) *Cosmocerca kalesari* sp. nov. (Nematoda: Cosmocercidae) in *Euphlyctis cyanophlyctis* (Amphibia: Anura) from Kalesar Wildlife Sanctuary, Haryana, India. *Acta Parasitologica* (Springer-Poland), 56(2), 202-207; ISSN 1230-282, DOI: 10.2478/s11686-011-0028-8.



Photomicrographs of Male *Cosmocerca kalesari* Rizvi, Bursey & Butia, 2011, captured in BX51 DIC Olympus microscope with DP 20 digital camera.

- A. Esophageal region
 - B. Mammiliform caudal papillae (arrows)
 - C. Gubernaculum
 - D. Spicule
 - E. Tail simple papillae
 - F. Single plectane
 - G. Arrangement of plectanes
- (Scale bar: A-F = 10 μ m, G= 50 μ m).

Marine Aquarium cum Regional Centre, Digha

The aquarium received an average of 350 visitors per day during the month. Forty seven examples of live ornamental exhibits (21 marine and 26 freshwater) were collected for exhibiting in the aquarium galleries. The major attractions for visitors were varieties of sea snakes (*Hydrophis* sp.), Guitar fish, Spiny lobster (*Panulirus ornatus*) and Common Octopus (*Octopus vulgaris*). In total, 66 specimens were collected through local surveys and 93 specimens were identified from old and recent collections. Advisory services were rendered to various schools and colleges during their study excursion to the Centre. Dr. Prasanna

Yennawar, Scientist-C and Officer-in-Charge of the Centre participated in the meeting of the 'Stakeholders' consultation & launch of the United Nations Decade on Biodiversity (UNDB) for Asia and Pacific' on 23rd May at New Delhi and the 'Interaction Meeting regarding Accounting & Procurement Systems with the World Bank & NPMU Official' on 25th May at the Institute of Environmental Studies and Wetland Management, Kolkata. Dr. Anil Mohapatra, Scientist-C participated in the meeting on 'Implementation Support and Supervision Mission for the ICZM Project' on 23rd May at IESWM, Kolkata.



Epinephelus latifasciatus



Gymnothorax reticularis



Portunus pelagicus



Gymnothorax javanicus



The Bengal sergeant



Jellyfish

North Eastern Regional Centre, Shillong

A field survey was undertaken in Mawlyngot area, East Khasi Hills, Meghalaya on 4th May and representative fauna collected. Two species of amphibians were identified from the back log collections of the Centre. Research scholars from the Department of Biotechnology, Assam University, Silchar and scholars from Gauhati University, Guwahati, Assam visited the Centre to study the general fish collections. A research scholar from the department of Environmental Science, North Eastern Hill University (NEHU), Shillong also visited the Centre for library consultation.

Dr. K. Venkataraman, Director, ZSI, visited the Centre on 25th and 26th May.

On the occasion of the *International Day for*

Biological Diversity, 2011, the Centre organized a 'sit and draw' competition on the theme "Biological Diversity", for the students of different schools in Shillong on 21st May. Altogether 59 students from 20 schools participated in the competition.



During the sit and draw competition organized by the Centre for school students on the occasion of the International Day for Biological Diversity

Estuarine Biology Regional Centre, Gopalpur-on-Sea

A field survey was conducted in the Chilika Lake, Odisha and representative fauna collected. Out of the unidentified collection from the Bhudabalanga Estuary in the Centre's faunal depository, 5 species of Mollusca and 6 species of fishes were identified.

Dr. L. Kosygin Singh, Scientist-C and Officer-in-Charge attended the Transboundary Diagnostic Analysis (TDA) Consultation Workshop for the Bay of Bengal Large Marine Ecosystem Project (BOBLME) on 18th May, held at Puri, Odisha and the Stakeholders' Consultation and Launch of the United Nations Decade on Biodiversity (UNDB) for Asia and

Pacific, organized by Ministry of Environment and Forests, at New Delhi on 23rd May.



A view of Chilika Lake at Satapada showing fishing activities

Central Zone Regional Centre, Jabalpur

During the month, backlog collections of 39 species of Coleoptera and 21 species of Hemiptera from Singhori Wildlife Sanctuary were identified and registered. Two manuscripts on Mammalia of Radhanagari Wildlife Sanctuary and Chandoli National Park (Maharashtra) have been revised and submitted for publication.

Identification and advisory services were rendered to Govt. J.S.T.P.G College, Balaghat and Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur, on 5 species each of Hemiptera and Odonata (Insecta). Scientific guidance was rendered to the Head, Dept. of Zoology & Bio-technology and five students of M.Sc (Zoology) from Govt. Model Science

College, Jabalpur on “preservation techniques of zoological specimens”. Dr. S. Sambath, Scientist-C and Officer-in-Charge, attended the meeting of the 'Stakeholders' Consultation and

Launch of the United Nations Decade on Biodiversity for Asia and Pacific', organized by the Ministry of Environment and Forests, at New Delhi on 23rd May.

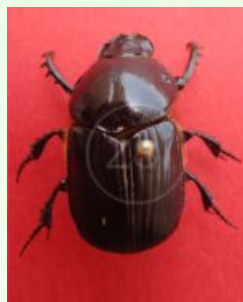
Scarabaeid beetles (Coleoptera) from Singhori W.L.S, Madhya Pradesh



Catharsius molossus Linnaeus



Onthophagus dama (Fabricius)



Onitis brahma Lansberge



Heliocopris gigas (Linnaeus)

Andaman and Nicobar Regional Centre, Port Blair

Marine and terrestrial ecosystems of Lohabarrack Crocodile Sanctuary, South Andaman have been surveyed during 10th, 15th and 18th of the month, to assess their faunal diversity. A total of 99 species of scleractinian corals, 11 species of echinoderms, 4 species of nudibranchs, 2 species of polyclads, 12 species of molluscs, 6 species of crabs, 80 species of marine fishes, 15 species of freshwater fishes, 19 species of fishes from the unnamed backlog collections, 9 species of odonates, 24 species of moths, 23 species of butterflies and 2 species of reptiles were identified and 32 species of birds were observed. Among these, the nudibranch, *Odontoglossa guamensis* Rudman, 1972, is identified as a new record to India. Besides, 178 specimens of corals, 90 specimens of echinoderms and 75 specimens of sponges were registered in the National Zoological Collection of the Centre while 70 specimens of insects were pinned. Two species of corals have been identified for the National Institute of Ocean Technology, Port Blair, on request. A project proposal on the 'Status Survey of Holothurians (Sea cucumbers) in Andaman and Nicobar Islands' has been prepared and submitted to the Dept. of Environment and Forests, Andaman and Nicobar Administration, as suggested by

the State Wildlife Board of A&N Islands. As per the suggestion of UNESCO, MAB programme, a revised boundary of Great Nicobar Biosphere Reserve with the inclusion of coastal and marine zones has been drawn and submitted to Andaman & Nicobar Administration for approval. Holiday camp students from the Science Centre, Port Blair were acquainted with the faunal diversity of Andaman and Nicobar Islands on their visit to the Regional Museum of the Centre on the eve of the International Museum Day on 18th May. Mr. Tamal Mondal and Mr. R. Deepak, JRFs of the Centre delivered lectures on Corals of A&N Islands and Mammals of A&N Islands respectively for the students under the vacation training programme organized by SACON at Port Blair, on 12th May. Dr. C. Sivaperuman, Scientist-C served as a member for the selection of different scientific posts at the Regional Centre of ICMR, Port Blair on 27th May. Dr. C. Raghunathan, Scientist-C and Officer-in-Charge attended the meeting of the 'Stakeholders' Consultation and Launch of the United Nations Decade on Biodiversity for Asia and Pacific' organized by the Ministry of Environment and Forests at New Delhi on 23rd May and served as a selection committee member for the recruitment of

scientific posts in the Department of Marine Biology and Coastal Sciences, Pondicherry University on 30th May.

Publications:

1. Sivaperuman, C. and Sanjeev Kumar, 2010. Diversity of vertebrate fauna of Ranthambhore National Park (RNP), India. In: *National Parks: Vegetation, Wildlife and Threats*. (Eds.) Grazia Polisciano and Olmo Farina, Nova Publishers, New York. pp.215-224.
2. Sivaperuman, C., Suresh Kumar Shah, C. Raghunathan and Ramakrishna, 2011. Diversity and distribution of Odonates in Great Nicobar Biosphere Reserve (GNBR), Andaman & Nicobar Islands. pp.119-127, In: *Entomology: Ecology and Biodiversity*, (Eds.) B.K. Tyagi and V. Veer. Scientific Publisher, Jodhpur.
3. Sivaperuman, C., C. Raghunathan and Suresh Kumar Shah, 2011. Diversity of Butterflies in Chidiyatapu Biological Park, Andaman and Nicobar Islands. 152-167. In: *Entomology: Ecology and Biodiversity*, (Eds.) B.K. Tyagi and V. Veer. Scientific Publisher, Jodhpur.
4. Sivaperuman, C., Suresh Kumar Shah, C. Raghunathan and Ramakrishna, 2011. Structure and species composition of butterflies in Great Nicobar Biosphere Reserve, Andaman and Nicobar Islands. 168-179. In: *Entomology: Ecology and Biodiversity*, (Eds.) B.K. Tyagi and V. Veer. Scientific Publisher, Jodhpur.
5. Sivaperuman, C., Suresh Kumar Shah, C. Raghunathan and Ramakrishna, 2010. Some new records of moth from Andaman and Nicobar Islands. *Biological Forum - An International Journal* 2(2): 68-69.
6. Titus Immanuel and C. Raghunathan, 2011. First record of the sponge *Damiria toxifera* (Poecilosclerida: Acarnidae) from the Andaman Sea, Andaman and Nicobar Islands. *Marine Biodiversity Records* (Mar. Biol. Ass. UK.), 4: e32 (103).



Nicobar Pigeon, *Caloenas nicobarica*



Large egret, *Bubulcus ibis*



Orange Headed Thrush, *Zoothera citrina*



Long-tailed Parakeet, *Psittacula longicauda*



Pacific Golden-Plover, *Pluvialis fulva*



Pompadour Green Pigeon, *Treron pompadora*



Holothurian, *Acadina molpadioides*



Coral, *Merulina ampliata*



Coral, *Plerogyra sinuosa*



Coral, *Stylopora pistilata*



Seastar, *Nardoa tuberculata*



Nudibranch, *Pseudoceros bedfordi*

Southern Regional Centre, Chennai

Scientists of the Centre identified 3 species of Cladocera and 2 species of blattids from Southern Western Ghats; polymorphic species of the whip scorpion, *Thelyphonus sepia* (Butler) from the collection of Yelagiri Hills, southern Eastern Ghats and Kaniyakumari Wildlife Sanctuary as well as 11 species of fishes and 5 species of Amphibia, during the month. Besides, 22 species of fishes received from DRC/ZSI, Jodhpur were identified by Dr. K. Rema Devi, Scientist-E & Officer-in-Charge & Dr. Jayasree Thilak, Scientist-C.

An Internship training programme was organized by the Centre for graduate and post graduate students of various colleges in Chennai, viz. the Madras University, Loyola College, Madras Women's Christian College, and Ethiraj College of Women, on taxonomy, collection and preservation of various fauna



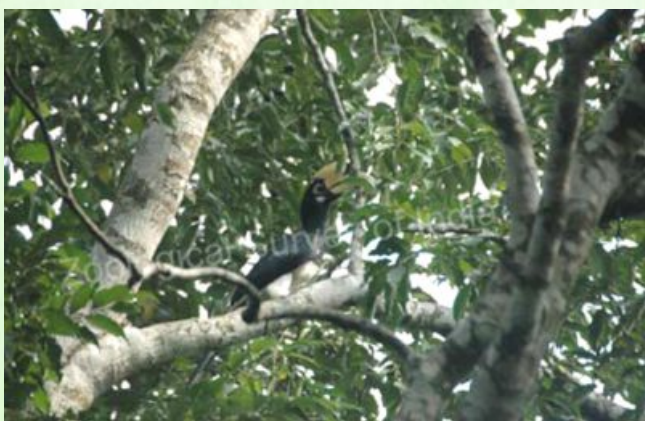
White-bellied Sea Eagle- *Haliaeetus leucogaster* Gmelin

and lectures were delivered by the scientists of the Centre. Dr. R. Aengals, Scientist-C delivered a lecture on "Snakes of Chennai" for the students of Govt Boys' Hr. Sec. School Thiruvannamiyur, for their Summer Training Camp held at Adyar Poonga Trust, Chennai, on 17th. Further, 2 research manuscripts were refereed for two journals.

Arunachal Pradesh Regional Centre, Itanagar

A field survey was undertaken in the Namdapha Tiger Reserve and Kobo area (Junai district) of Assam to relocate four of the believed to be 'Lost Amphibians' of India (*Philautus sahai*, *Philautus shyamrupus*, *Philautus namdaphaensis* and *Rhacophorus microdiscus*) by Dr. Gopinathan Maheswaran, Scientist-C and Officer-in-Charge of the Centre along with Dr. S. D. Biju of the University of Delhi, from 18th-29th. The team stayed at the Hornbill Camp of

Namdapha Tiger Reserve and made several night searches in the nearby areas, especially at RaniHEEL (one of the places from where one of the amphibians concerned was reported). During the survey for the amphibians, the team also sighted some interesting bird species such as the Green Magpie, *Cissa chinensis* and the Hooded Pitta, *Pitta sordida* in the Namdapha Tiger Reserve and Kobo areas, respectively.



Oriental Pied Hornbill



Pierid butterfly, *Gandaca harina*

Sunderban Regional Centre, Canning

One local survey was conducted in the Canning landing centre and Dabu. A total of 46 specimens were collected which included 12 fishes, 26 gastropods, 3 bivalves and 5 prawns, of which 4 species of fishes were identified and registered.



Indiscriminate fish collection and diversity loss in Sunderbans

Dr. D. Suresh Chand attended the Meeting on 'Stakeholders' Consultation and Launch of the United Nations Decade on Biodiversity for Asia and Pacific', organized by the Ministry of Environment and Forests at New Delhi on 23rd May.



Abundance of Bombay duck in the Canning Fish landing Centre

Gangetic Plains Regional Centre, Patna

During the month, out of the benthic macro-invertebrate samples collected from River Damodar in Jharkhand and West Bengal (Sadargaht in Burdhan District), 12 species of Mollusca (*Parreysia favidens*, *Parreysia caerulea*, *Gyraulus euphraticus*, *Bellamya bengalensis*, *Parreysia favidens*, *Gyraulus convexiusculus*, *Diagonistoma pulchella*, *Indoplanorbis exustus*, *Radix luteola*, *Thiara lineate*, *Brotia costula*, *Bellamya bengalensis*) were identified and registered. One research paper was published and a manuscript on the new distributional records of three crustaceans (Isopods) from

River Damodar and River Subernrekha finalised. Dr. Gopal Sharma, Scientist-C and Officer-in-Charge attended the meeting of the 'Stakeholders' Consultation and Launch of the United Nations Decade on Biodiversity for Asia and Pacific', organized by the Ministry of Environment and Forests, at New Delhi on 23rd May.

Publication:

Kirti, J.S & Gill, N.S. (2010) Recharacterization of genus *Nepita* Moore (Lepidoptera: Arctiidae: Lithosiinae). *Entomon* 35(2):105-109.

Western Regional Centre, Pune

Field surveys were undertaken in Tamhini Forest and Lonvalva-Khandala areas on 3rd and 4th May. During the month, 7 species of Acrididae, 3 species of Collembola, 1 species of Acari, 7 species of Brachiopoda, 5 species of Reptilia and 4 species of Decapoda were identified. A research paper was reviewed for a journal and comments offered. Four research

papers were communicated. Dr. R. M. Sharma, Scientist-D & Officer-in-Charge, attended the meeting of the 'Stakeholders' consultation and launch of the United Nations Decade on Biodiversity for Asia and Pacific', organized by the Ministry of Environment and Forests, at New Delhi on 23rd. Dr. S. S. Jadhav, Sr. Zool. Asst. attended the workshop on Review and

planning Exhibition of Government publications held at Yashawantrao Chavan Academy of Development Administration, Pune

on 27th. Four students of M.Sc. (Biodiversity) of Garware College, Pune (MH) visited the Centre, in connection with their studies.



Heterometrus sp.



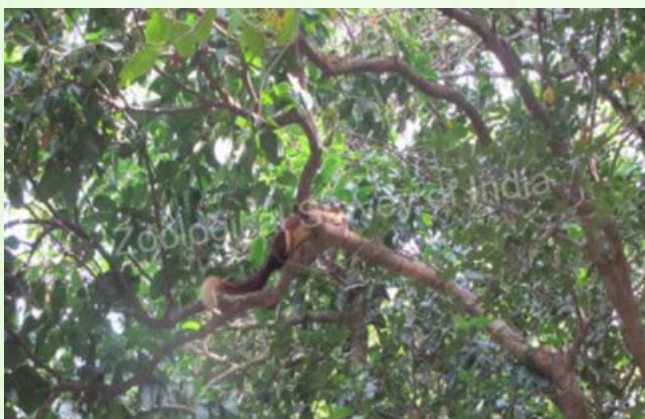
Deccan Banded Gecko (*Geckoella deccanensis*)



Common green whip snake (*Ahaetulla nasuta*)



A Juvenile Shikra (*Accipiter badius*)



Giant Squirrel (*Ratufa indica elphinstonii*)



Bonnet macaque (*Macaca radiata*)

Western Ghat Regional Centre, Kozhikode (Calicut)

Two new species of the genus *Psilocera* (Pteromalidae: Hymenoptera), namely, *P. namdaphaensis* and *P. intermedia* were described from the collections of the Namdapha National Park, Arunachal Pradesh. Besides, 4 species of

Pteromalidae (Hymenoptera), 3 species of Platygasteridae (Hymenoptera) and 8 species of Centipedes (Chilopoda: Scolopendromorpha) were identified.

An Interactive Identification System (IIS- with

two components, the Fact sheets providing the basic details of the taxa and an interactive dichotomous key to genera, with fact sheets embedded) for the common genera of Platygastriid egg parasitoids of rice ecosystem in Kerala (India) was prepared for launching in the departmental website.

Four research papers were published and one paper was submitted for publication.

Four identification & advisory services were rendered.

Dr. K. Rajmohana, Scientist-C, visited the Parasitoid Taxonomy and Biocontrol lab., at Annamalai University, Chidambaram, Tamilnadu for a 5 day study-visit from 24th to 28th and studied the platygastriid collections of the department. One species under the genus *Nixonia* Masner and two species under *Aradophagus* Ashmead (Hymenoptera: Platygastroidea), not represented hitherto in the collections made from Western Ghats, were studied in detail, of which one species is being described as new to science.

Dr. Muhamed Jafer Palot, Asstt. Zoologist, delivered a talk on "Butterfly diversity of Kerala" at the state level residential vacation training programme for School children at the Community Agrobiodiversity Centre, M. S. Swaminathan Research Foundation (MSSRF), Kalpetta, Wyanad on 14th, organized by MSSRF & Department of Biotechnology (DBT), New Delhi.

C. Radhakrishnan, Scientist-F and Officer-in-Charge attended the meeting of the

'Stakeholders' Consultation and Launch of the United Nations Decade on Biodiversity for Asia and Pacific', organized by the Ministry of Environment and Forests at New Delhi on 23rd May.

The face-up scanner received under the Special Grant of MoEF was installed at the Centre.

During the month, 197 visitors paid their visits to the museum.

Publications:

1. P. M. Sureshan, 2011. A Revision of Oriental Species of *Psilocera* Walker (Hymenoptera: Chalcidoidea: Pteromalidae) with descriptions of two New Species from Namdapha National Park, Arunachal Pradesh, India. *International Scholarly Research Network ISRN Zoology*, 2011: 1-6; Article ID 391796.
2. Muhamed Jafer Palot, 2010. A report on the migration of the butterfly *Phalantha alcippe* (Nymphalidae) in the Andaman and Nicobar islands. *J. Bombay Nat. Hist. Soc.* 107 (2):168-169.
3. Rajmohana, K and Divya, K. P, 2011. Checklist of Platygastriinae and Sceliotrachelinae (Hymenoptera: Platygastriidae) of India. <http://www.zsi.gov.in/checklist/Checklist%20Platygastriinae%20and%20Sceliotrachelinae.pdf>
4. K. P. Dinesh & C. Radhakrishnan, 2011. Checklist of amphibians of Western Ghats. *Frog leg* (Newsletter of the Amphibian Network of South Asia and Amphibian Specialist Group - South Asia), 16:15-21.

New Species of Hymenoptera from Namdapha National Park



Psilocera namdaphaensis sp. nov. female



Psilocera intermedia sp. nov. female



Dr. P. M. Sureshan, Scientist-C, explaining about the exhibits in the Museum at the Centre to the students nominated by the M. S. Swaminathan Research Foundation



The Face-Up Scanner, installed at the Centre



Teachers and students of the Balussery Balavedy, Kozhikode, on their visit to the museum at the Centre

ANIMAL OF THE MONTH

The Indian Golden Gecko *Calodactylodes aureus* Beddome, 1870



A dominant male (golden) with females



Close up of a female

[Text & Photo: Dr. K. A. Subramanian, Zoological Survey of India, Kolkata;
Photographed at Thirupati Hills, Andhra Pradesh]

The genus *Calodactylodes* comprises of large, distinctive geckos endemic to rocky habitats in peninsular India and Sri Lanka. The Indian

Golden Gecko (*Calodactylodes aureus* Beddome, 1870) is considered as a Gondwanan relic. The genus is characterized by its unique fingers and

the genus name translates into '*beautiful fingers*'. The Indian Golden Gecko was originally recorded from Tiruppattur in Vellore district, Tamil Nadu. Malcolm Smith in his Fauna of British India (Reptilia Vol-2) wrongly interpreted the type locality as Thirupati Hills. The adults have a body and tail length of 85mm and 100mm respectively. The females are brownish white above, dotted with brown. The males are golden flecked with brown. Currently this species is reported from Eastern Ghats in southern Odisha, Andhra Pradesh and Tamil Nadu. They live in small communities of 10-15 individuals among rock crevices and caves. They lay eggs in clusters. The Golden Gecko is protected under the Indian Wildlife Protection

Act (Schedule-1), and globally assessed as endangered by IUCN.



The foot of Golden Gecko, showing characteristic digital expansions (after Smith, Boulenger)

Further reading:

<http://www.zoosprint.org/ZooPrintJournal/2007/June/2727-2729.pdf>

ZSI IN NEWS

'Confusing Green Bush Frog' found in Shola forests

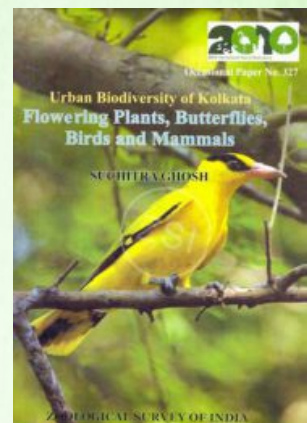
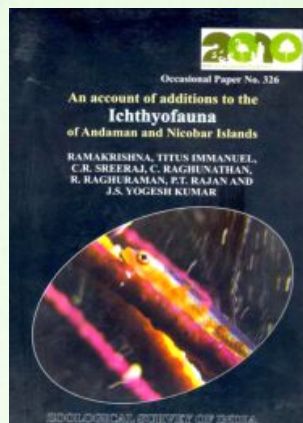
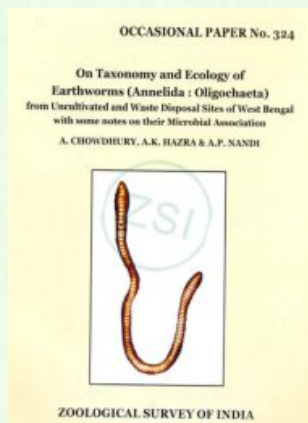
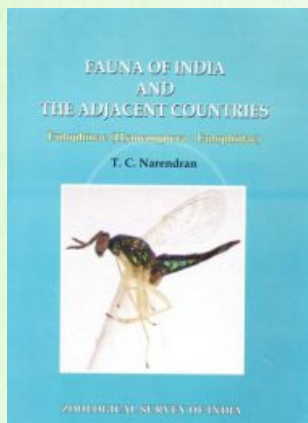
<http://expressbuzz.com/topic/confusing-green-bush-frog-found-in-shola-forests/271342.html>

OUT OF THE BOX

Top 10 New Species Named

<http://news.discovery.com/animals/top-10-new-species-photos-110523.html>

RECENT PUBLICATIONS OF ZSI



PAINTINGS FROM ZSI HERITAGE ALBUM



Water Monitor
Varanus salvator (Laurenti)