

ZSI e-NEWS

The Monthly Electronic Newsletter of Zoological Survey of India

Volume - 04 :: Number - 7

July 2012

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



ZSI e-NEWS

Back issues of *ZSI e-NEWS*

[Visit www.zsi.gov.in/...]

Headquarters, Kolkata

During the month, scientists of Headquarters identified, 3 genera of Protozoa, 2 species of Platyhelminthes, 1 genus of Nematelminthes, 6 species of Collembola, 21 species of Hemiptera, 50 species of Hymenoptera, 5 species of Orthoptera, 10 species of Coleoptera, 11 species of Isoptera, 11 species of Acarina, 11 species of Arachnida, 48 species of Mollusca and 10 species of fishes from the States of Assam, Delhi, Himachal Pradesh, Jammu & Kashmir, Kerala, Madhya Pradesh, Meghalaya, Maharashtra, Nagaland, Odisha, Tamil Nadu (South Eastern Ghats), Tripura, Uttarakhand, Uttar Pradesh and West Bengal.

Labronema neodiversum sp. n., *Coomansinemoides wasimi* n. gen. et n. sp. & *Paraxonchium maximus* sp. n., (Nematoda: Dorylaimida) have been added as new to science.

The genus *Oomyzus* Rondani, *Notanisomorphella* Girault (Hymenoptera: Eulophidae) and the species *Neotrichoporoides viridimaculatus* (Fullaway), *Oomyzus scaposus* (Thomson), *Notanisomorphella flaviventris* (Girault) (Hymenoptera: Eulophidae), the genus *Eupelmus* Dalman (Hymenoptera: Eupelmidae) and the species *Eupelmus australiensis* (Girault) (Hymenoptera: Eupelmidae) were reported for the first time from Rajasthan.

The trematode parasites *Pegosomum egretti* Srivastava, *Paramphistomum cervi* (Stunkard, 1790) Fischöder, 1901, *Anchitrema sanguineum* (Sonsino, 1894) Looss, 1899, *Cyclocoelium elongatum* Harrah, 1921 from the hosts cattle egret, cattle, *Calotes versicolor* and *Cissa chinensis* respectively, have been added as new records to Himachal Pradesh.

The Holotype and 10 Paratypes of *Labronema neodiversum* Mondal, Manna & Gantait, 2012 (Nematoda: Dorylaimida) have been deposited in the National Zoological Collection. Besides, a Paratype of *Thryssatrema hanumantharai* Madhvi, 2012, (Trematoda: Digenea: Fellodistomidae) has been deposited by Prof R.

Madhavi, Andhra University, Vishakhapatnam.

The Centre for DNA Taxonomy (CDT) under Molecular Systematics Division (MSD) has initiated DNA Barcoding of Indian Fauna using mitochondrial cytochrome c oxidase (mtCOI) and other mitochondrial and nuclear gene regions to produce DNA barcodes (COI and non-COI). Genomic DNA has been isolated from 8 animal species. Polymerase Chain Reaction (PCR) was carried out in a thermal cycler (Eppendorf) with universal primer LCO-HCO (Hebert et al. 2003) specific to mitochondrial cytochrome oxidase I (COI), which amplified approximately 660 base pairs fragments.

During the month, 14 research papers were published, 8 papers were accepted and 12 communicated.

Identification and advisory services were rendered on 22 lots of specimens, received from different institutions and organizations. In addition, identification and advisory services were also rendered to Regional Sericultural Research Station, Kalimpong, West Bengal, Dr. S. K. Shrivastava, Prof. & Head, Dept. of Entomology, COA, IGKV, Raipur, Mr. Amit Kr Geyen, Bidhan Nagar College, Salt lake, Kolkata, Mr. M. M. Hasan, AL-Ameen Mission, Birbhum, West Bengal, S. S. Homechaudhuri, Prof. of Zoology, University of Calcutta, Kolkata, Dr. Sumit Homechaudhuri, Professor of Zoology, Department of Zoology, University of Calcutta, Mr. Sankarsan Roy, Bidhannagar Govt. College, Salt Lake, Kolkata, Aheli Mazumder, M. Sc. Zoology Student, Presidency University and Sudeshna Biswas, Ballygunge Science College, Kolkata. One truck load of confiscated shark specimens at Diamond Harbour Range Office was examined on request from the Divisional Forest Officer, 24-Parganas South Division, Alipore, Kolkata and 7 species of sharks and rays were identified

and the identification report submitted. Besides, confiscated Mollusca (Freshwater Bivalves and Sea Shells) were identified for the Regional Deputy Director of Wildlife Crime Control Bureau (NR), New Delhi.

Miss Swagata Mondal of Zoology Department, Calcutta University, visited the Nemathelminthes Section for identification of nematode specimens. Smt. Mithila Das, Lecturer in Zoology, S.N. College, Rajkanika, Kendrapara dist., Odisha, Shri Emdad Hossain, Associate Professor Pharmacy College, Azamgarh, Uttar Pradesh, and Shri J. A. Johnson, Scientist, Wildlife Institute of India, Dehradun visited for faunal identification assistance from Headquarters.

Library Section added 2 Books, 41 issues of Indian Journals (By Purchase) and 33 issues of Foreign & Indian Journals (By Exchange).

On behalf of the Director, ZSI, Shri S. S. Mishra, Scientist-B and Officer-in-charge of Marine Fish Section attended the meeting of the Similipal Biosphere Reserve Management Council (SBRMC) on 31st July at Odisha Secretariat, Bhubaneswar.

Dr. K. Venkataraman, Director, ZSI, attended a meeting at Gulf of Kachchh Marine National Park, Jamnagar, Gujarat between 1st and 4th July, 2012 and visited Narara, Poshitra, Lakku Point and other Islands of Gulf of Kachchh, a review meeting along with Dr. (Smt.) Nandita Chatterjee, I.A.S., Additional Secretary, MoEF, Govt. of India from 9th and 11th July at Andaman & Nicobar Regional Centre, ZSI, Port Blair. He has also attended a meeting with the Chief Secretary of West Bengal, Additional Secretary, MoEF and other officers in connection with the establishment of NGT in West Bengal and visited the Marine Biology Regional Centre and Southern Regional Centre of ZSI at Chennai in connection with review and functions of these Centres under the Chairman ship of Dr Nandita Chatterjee, IAS, Additional Secretary, MoEF.

Publications:

1. Gantait, V.V. & Sen, D. 2012. Occurrence and distribution of dorylaimid and tylenchid nematodes of Andaman and Nicobar Islands. *Advances in Life science*, 1 (1): 85-87.
2. Husain, Akhlaq and Sharma, Gaurav 2012. Studies on diversity of Fishes, Amphibians and Reptiles of Thar Desert with conservation status. In: *Deserts: Fauna, Flora and Environment*. Editors: J. C. Guevara, E. G. Grunwaldt and C. Sivaperuman. Nova Science Publishers, Inc., New York, USA. pp. 23-52.
3. Sharma, Gaurav 2012. Studies on the diversity of Odonata and Lepidoptera fauna of Mount Abu, Rajasthan, India. In: *Recent Advances in Biodiversity of India*. Eds.: C. Raghunathan, C. Sivaperuman and K. Venkataraman. Published by Director, Zool. Surv. India, Kolkata. pp. 243-250.
4. Sharma, Gaurav 2012. Studies on the reproductive behaviour of *Pseudagrion rubriceps* Selys (Odonata: Arthropoda) at Gyan Sarovar, Mount Abu, Rajasthan, India. In: *Recent Advances in Biodiversity of India*. Eds.: C. Raghunathan, C. Sivaperuman and K. Venkataraman. Published by Director, Zool. Surv. India, Kolkata. pp. 251-255.
5. Kumar Girish, P. and Kazmi, S.I. (2012). Eulophidae and Eupelmidae (Insecta: Hymenoptera: Chalcidoidea) of Indian Thar desert. In: *Deserts: Fauna, Flora and Environment*. Editors: J. C. Guevara, E. G. Grunwaldt and C. Sivaperuman. Nova Science Publishers, Inc., New York, USA. pp. 155-164.
6. Chitra J. Ramanibai, R. 2012. Status on Distribution of Rotifers; In Muttukadu Backwater, Bay of Bengal. (*J. Environ & Sociobiol*). 9(1); 51-56
7. Chitra J. and Prabakaran K. Temple tanks and ponds of Tamilnadu: conservation strategies. (*J. Environ & Sociobiol*). 9(1) 79-82.

8. Gokul, A. and K. Venkataraman. 2012. Spatial preference of coral associated Brachyuran crabs in Gulf of Mannar Marine Biosphere Reserve. *J. Environ. & Sociobiol.*, 9(1):57-62.
9. Dev Roy, M. K. 2012. A preliminary report on brachyuran crabs (Crustacea: Decapoda: Brachyura) from mangroves of Odisha. *J. Environ. & Sociobiol.*, 9(1):97-98.
10. Dev Roy, M. K. and Gokul, A. 2012. A checklist of Indian Stomatopods (Crustacea: Stomatopoda). *J. Environ. & Sociobiol.*, 9(1): 87-92.
11. Dev Roy, M. K., Mitra, S. 2012. Red Piranha *Pygocentrus nattereri* (Characiformes: Charadidae): An invasive species in freshwater ecosystems of eastern states of India. *J. Environ. & Sociobiol.*, 9(1): 99-100.
12. Dev Roy, M. K., Mitra, S. 2012. On new records of crabs (Crustacea: Decapoda: Brachyura) from Himachal Pradesh, Western Himalayas. *J. Environ. & Sociobiol.*, 9(1): 92-95.
13. Dev Roy, M. K., Mitra, S. 2012. Notes on the nesting plant of Baya Weaver Bird (*Ploceus* sp.) in Odisha mangroves. *J. Environ. & Sociobiol.*, 9(1): 96.
14. Dev Roy, M. K., Mitra, S. and Gokul, A. 2012. On a new host record of *Nerocila poruvae* (Crustacea: Isopoda: Cymothoidae) from West Bengal. *J. Environ. & Sociobiol.*, 9(1): 105-107.



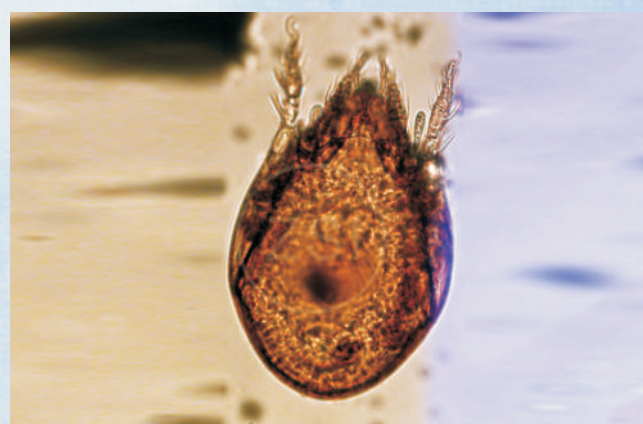
Sting Ray, *Himantura bleekeri* (Blyth)



Sting Ray, *Himantura fava* Annandale



Mite, *Schelorbates curvialatatus*



Mite, *Lamellobates palsustris*



Spider, *Cyrtophora cicatrosa*



Cucumber spider, *Araniella cucurbitina*



Large Signature spider, *Argiope aemula*

Hard corals of Gulf of Kachhh, Gujarat



Coscinaraea monile (Forskal)



Goniopora planulata (Ehernberg)



Goniopora stutchburyi Wells



Turbinaria mesenterina (Lamarck)

High Altitude Regional Centre, Solan

A faunistic survey tour in Spiti Valley, a Cold Desert (Dist. Lahul & Spiti, Himachal Pradesh) has been conducted from 2nd-19th July and representative faunal samples of 14 animal groups collected from different alpine habitats falling between 3200 m to 4800 m asl., covering agriculture fields, water bodies including the Chandertal Lake (a *Ramsar site*) and Komic, the Highest Village in Asia. During the month, 3 species of earthworms from Kaltaop-Khajjiar Wildlife Sanctuary, 1 species of earthworm and 1 species of Orthoptera from Chail Wildlife Sanctuary, 6 species of butterflies from Spiti Cold desert and 3 species of Pisces from NRC/ZSI, Dehradun collections were identified. Identification and advisory services were rendered to a Ph.D. scholar from Manipur



Komic village-the highest village in Asia (alt. 4520msl)

University, Imphal and Dr. R. S. Giraddi, Professor, Dept of Agric. Entomology, University of Agricultural Sciences, Dharwad, Karnataka.



Chandertal Lake



Yellow billed chough, common at Chandertal

Northern Regional Centre, Dehra Dun

An intensive survey of Dehradun district was undertaken for the collection of butterflies for molecular study. Ten species of Acridoidea from Dehradun district and 8 species from Punjab surveys were identified. Permanent slides of helminths collected from amphibian hosts and soil nematodes collected were prepared for morphological studies. Ten species of Pisces were digitized and metadata of 23 records of Pisces and 10 records of nematodes entered in the database. Six research manuscripts received from Headquarters were revised as per the referee's comments.

The Benchtop Scanning Electron Microscope Neoscope JCM-5000 was installed at the Centre. Shri P. T. Bhutia, Scientist-F & Officer-in-Charge and Dr. P. C. Tak, Scientist-D attended the meeting of the "Study visit of the Department-related Parliamentary Standing Committee on Science & Technology", Environment & Forest on 4th July at the Forest Research Institute, Dehradun and presented the activities of the Centre.

10 local visitors visited the Museum of NRC.

Publication:

Bahuguna. A 2012: *Vigyan Lekhan ke Prakash stamba*.

Dr. Ramesh Dutta Sharma, *Vigyan Paricharcha* (UCOST) 2(3): Jan-March 2012:56-57.



The Benchtop Scanning Electron Microscope-Neoscope JCM-5000- installed at the Centre

Central Zone Regional Centre, Jabalpur

During the month, 12 species of Hemiptera and 6 species of Odonata were identified and registered from Singhori and Veerangana Durgawati Wildlife Sanctuaries, Madhya Pradesh. A faunistic survey was undertaken in 3 districts of Madhya Pradesh from 28th June-12th July and representative fauna collected. Identification & Advisory services were rendered to Shri Pankaj Srivastava, IFS, Chief Conservator of Forests, Asharam Bapu Chouraha University Campus, Indore, Madhya Pradesh, on 72 species of insects of various orders and Mr. Vishal Deshpande (NGO) Lokmangal Mudranalaya, Satara, Maharashtra, on 68 species of spiders. Three research papers were published and one research paper communicated.

Desert Regional Centre, Jodhpur

Eleven species of nematodes from Rajasthan (which include 2 new records for the State), 10 species of fishes from Chambal River and 1 species of fish from Kachchh Biosphere Reserve were identified and registered. Besides, 3 genera of ants were identified from Rajasthan. Dr. H. S. Banyal, Scientist-C provided information on the fauna displayed in the museum at the Centre to a group of M.Sc.

Publications:

1. S. Sambath, Avinash Jain, Roy Choudhury, N, Kulkarni, N and Joshi, K.C. 2012. Effect of host plants on the growth and development of *Spirama retorta* Clerck (Lepidoptera: Noctuidae). *Indian Journal of Forestry*, 35(2): 213-217.
2. Chandra K., Kushwaha S., Sambath S. and Biswas B., 2012. Distribution and Diversity of Hemiptera Fauna of Veerangana Durgavati Wildlife Sanctuary, Damoh, Madhya Pradesh (India). *Biological forum An International Journal* 4(1): 68-74.
3. Chandra K. & Kushwaha S., 2012. Studies on the Hemiptera Fauna of Barnawapara Wildlife Sanctuary, Chhattisgarh, India. *Deccan Current Science International Journal* 7:101-108.

students from J. N. V. University, Jodhpur, on 25th July. During the month 23 visitors visited the museum.

Publications:

1. Bohra, P. & Sultana, R. 2012. Plant parasitic nematodes associated with economically important crops in Rajasthan. In : Proceedings of UGC sponsored National Conference on Prospects and Challenges in

field of Applied Zoology, January,12-13, 2012 organized at Lachoo Memorial College of Science and Technology, Jodhpur (Eds. Saraswat, P. and Rajpurohit, P.), pp. 86-90.

2. Bohra, P. & Vashistha, R. 2012. Plant parasitic nematodes and plant diseases. In: Proceedings of UGC sponsored National Conference on Prospects and Challenges in

field of Applied Zoology, January 12-13, 2012 organized at Lachoo Memorial College of Science and Technology, Jodhpur (Eds. Saraswat, P. and Rajpurohit, P.), pp. 91-92.

3. Tak, N. & Kazmi, S. I. 2011. On a collection of Insecta: Hymenoptera: Formicidae from Uttarakhand. *Rec. zool. Surv. India*, 3 (2):39-49.

Gangetic Plains Regional Centre, Patna

The first quarterly survey tour to the Protected Areas of North Bihar was conducted from 7th-17th July and representative faunal samples pertaining to gastropods, pelecypods, aquatic insects, malacostraca, annelids and planktons were collected. Besides an ad-hoc sampling of benthic macro-invertebrates was done in Ram Nagar Kund in Vaishali district of North Bihar on 28th July. Twelve species of Mollusca and 9 species of Lepidoptera (Family: Noctuidae) were identified during the month. Three Research Scholars and 2 Post graduate students

visited the Centre for identification of Mollusca and collected Insecta samples from the local areas.

Dr Navneet Singh, Scientist- C has been invited as one of the 100 entomologists of the world to attend the 2nd International symposium on Insect BioIndustry: Achievement & Challenge, organized by the Institute of plant medicine, Kyungpook National University, Daegu, Korea to be held in Korea from 17th-19th August, 2012.

Fifty five students of different schools of Patna visited the museum at the Centre.

Sunderban Regional Centre, Canning

4 species Orthoptera were identified and registered. 16 school students and general

public visited the museum during the current month.



A view of Sunderban during High Tide

Marine Aquarium cum Regional Centre, Digha

Twenty nine species of fishes and 33 species of Mollusca were identified during the month. The specimens identified include *Monodactylus kottelati* Pethiyagoda, 1991, which is the first report from Indian waters. Also, *Acanthurus triostegus* (Linnaeus, 1758) turned out to be the first report of the species from Chilika lagoon. Seventy eight examples of live marine ornamental fauna were collected for exhibiting in the aquarium galleries. The major attraction among the aquarium exhibits were the parrot



Acanthurus triostegus

fish (*Scarus ghobban*), surgeon fish (*Acanthurus tristis*) and the squirrel fish (*Sargocentron* sp.). The aquarium received an average of 268 tourists per day. One research paper was published and one paper communicated.

Publication:

P. Yennawar, D. Ray, A. Mohapatra (2012). First record of *Acropoma argentistigma* from Indian waters. *Marine Biodiversity records* 5: e65, 1-3 (Publisher: Cambridge Journals).



Monodactylus kottelati

Western Regional Centre, Pune

During the month, 4 species of Amphibia, 6 species of Reptilia, 8 species of Orthoptera, 12 species of Odonata, 6 species of Hymenoptera and 1 species of Collembola were identified. Three research papers were published. Five reptile specimens received from ACF Khamgaon and RFO, Lonavala, horns of *Cervus* sp. received from Roha Police, district Thane and Local Crime Investigation Branch, Sangli and 2 fake tiger skins received from Forest Department, Ratnagiri, Maharashtra for identification were identified and reports submitted. Identification service was rendered to the Dept. of Zoology, D.Y. Patil College, Pimpri, Pune, on Hymenoptera specimens and photographs of Odonates.

Publications:

1. Pati, S.K. and M.V. Rao. 2012. Growth studies of foulers in a polluted Indian harbour. *Journal of Marine Biological Association of India*, 54 (1): 30-37.
2. Pati, S.K., M.V. Rao and M. Balaji. 2012. A new record of the Indian brown mussel *Perna indica* from Visakhapatnam coast, Bay of Bengal. *Bionotes*, 14 (2): 58.
3. Priyanka Dutta Saha, S.M. Gaikwad and R. M. Sharma. 2012. A preliminary study on odonate fauna from Tamhini and Environs, Pune, Maharashtra. *Bionotes* 14 (2): 63-64.

Marine Biology Regional Centre, Chennai

An extensive field survey was conducted along the coast of Tamil Nadu and collected representative faunal elements. Three species of Mollusca, 4 species each of rhizopods, nematodes, and echinoderms, 13 species of crabs and 24 species of fishes were identified out of the material collected from Palkbay and Gulf of Mannar Biosphere Reserve. During the month, 27 species were digitized and metadata compiled. Two research papers were published. Dr. C. Venkatraman, Scientist-C & Officer-in-Charge, attended the Institutional Animal Ethics Committee (IAEC) meeting at Stanley Medical College, Chennai, as CPCSEA Link Nominee. Identification service was rendered on confiscated shell items to Additional Deputy Commissioner of Police, South Dist., New Delhi. Dr. C. Venkatraman

and Dr. Rajkumar Rajan, Scientist-C supervised the research projects of JRFs of the Centre. One thousand one hundred and twenty five tourists visited the marine aquarium and museum during the month.

Publications:

1. Shrinivaasu, S, K. Venkatraman, and R. Mohanraju, 2011. *Baseodiscus hemprichii* (Ehrenberg, 1831) (Phylum Nemertea) New distributional record from Andaman and Nicobar Islands, India. *Rec. zool. Surv. India*: 111(Part1):1-4.
2. Venkatraman, C and K. Venkataraman. 2012. Diversity of Molluscan fauna along the Chennai Coast. Proceedings of the National Conference on Marine Biodiversity, *Uttar Pradesh State Biodiversity Board*. Pp 29-35.



Aplysia morpha



Parthenope pelagicus



Brachypterois serrulata



Holothuria edulis

Southern Regional Centre, Chennai

Two faunistic surveys were conducted in Middle Eastern Ghats of Andhra Pradesh and Kalakad-Mundanthurai and representative fauna collected. Five species of Odonata and 15 species of gastropods were identified from the Southern & Middle Eastern Ghats. Three papers were published. Three identification and advisory services were rendered. Dr. K. Ilango, Scientist-D & Officer-in-Charge attended the review meeting of Tamil Nadu State Environment Policy at the TN Forest Department on 4th July, as a member of the 'Core Group'. Dr. R. Aengals, Scientist-C and Dr. R. Babu, Scientist-C, delivered invited lectures to the Government School students on "Reptiles in Wetlands" & "Invertebrates in Wetland Ecosystem" respectively at an Environmental Education Programme, Adayar Poonga, Chennai on 16th July. Dr. V. M. Sathis Kumar, Sr.

Zoological Assistant received the MAB Young Scientists Award from UNESCO.

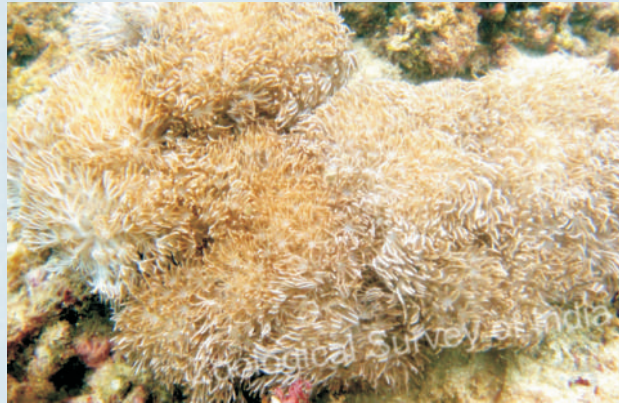
Publications:

1. Sivasankaran, K., S. Ignacimuthu, M. Gabriel Paulraj and S. Prabakaran. 2012. A Checklist of Noctuidae (Insecta: Lepidoptera: Noctuoidea) of India. *Rec. zool. Surv. India*. 111(3):79-101.
2. Venkitesan. R. and Mukhopadhyay A. K. 2012. New records of *Comitas albicincta* (Adams & Reeve, 1830) and *Turritella bicingulata* Lamark, 1822 (Mollusca: Gastropoda: Turritellidae) from India. *Rec. zool. Surv. India*. 111(2): 95-97.
3. Venkitesan. R. and Mukhopadhyay A. K. 2012. Contribution to the knowledge on Indian Marine Mollusc family Terebridae. *Rec. zool. Surv. India*. 111(3):49-77.

Andaman and Nicobar Regional Centre, Port Blair

Field surveys were conducted in the marine and terrestrial ecosystems of Chester Island, Houbday Island and Grub Island in Mahatma Gandhi Marine National Park from 3rd-5th July. The survey yielded information on 89 species of scleractinian corals, 26 species of soft corals, 26 species of echinoderms, 8 species of gastropods, 8 species of crabs and 20 species of fishes from the marine habitat and 17 species of moths, 15 species of butterflies, 2 species of amphibians, 4 species of lizards, 1 species of snake and 4 species of mammals from the terrestrial habitat as well as 4 species of fishes from the freshwater streams. Among them, scleractinian coral *Favia marshae* Veron, 2000 was a new record to Indian waters. Besides, 69 specimens of scleractinian corals, 20 specimens of soft corals, 45 specimens of echinoderms, 2 specimens of nudibranchs, 46 specimens of gastropods, 3 specimens of shrimps, 2 specimens of fish, 10 specimens of amphibians, 23 specimens of reptiles and 4 mammals were registered in the National Zoological Collection. A new species

of bird, named as 'Great Nicobar Crane', has been described by the scientists of the Centre. Preparation of books on Acroporids of A&N Islands, Polyclads of A&N Islands, Sea Anemones of A&N Islands, and Fishes of A&N Islands are under progress. A Project proposal on 'Establishment of ENVIS Centre at ZSI, Port Blair' has been prepared and submitted to ZSI headquarters for onward transmission to the administrative Ministry. Dr. C. Raghunathan, Scientist-C & Officer-in-Charge, made a presentation on revised management plan for Lohabarrack Crocodile Sanctuary to the Officers of the Department of Environment and Forests, A&N Administration on 13th July. He also convened a Stake holder's meeting for the 'Filming of Island Ecosystem' at ZSI, Port Blair on 20th July and attended the review meeting at PCCF Office, Department of Environment and Forests, Port Blair in which Dr. C. Sivaperuman, Scientist-C made a presentation on 'Techniques of Crocodile Census'.

Soft coral *Heteroxenia fuscescens* (Ehrenberg)

During the visit of Dr. Nandita Chatterjee, I.A.S, Additional Secretary, MoEF, Govt. of India, to ZSI, Port Blair

North Eastern Regional Centre, Shillong

During the month, 7 species of fishes and 8 species of aquatic Hemiptera from Nongkhylllem Wildlife Sanctuary, Meghalaya, were identified. From the backlog collections of rodents from Mizoram, 4 species including 2 new records - *Leopoldamys edwardsi* (Thomas) and *Berylmys mackenziei* (Thomas) - were identified. From the backlog collection of Amphibia from Manipur, 3 species including

one new record, *Duttaphrynus stuarti* (Smith), were identified. Images and metadata of *Pillaia indica* (Holotype & 2 Paratypes) belonging to Pisces: Synbranchiformes: Chaudhuriidae were digitized and 39 entries of Amphibia databased. Laboratory facilities were provided to Dr. Abhijit Das, Herpetologist from Aaranyak, a society for Biodiversity conservation, Assam, for morphometric studies of amphibian species.

*Odorrana livida* (Blyth)The hill stream spineless eel, *Pillaia indica* Yazdani

Information on the mammalian fauna of Garo Hills, based on the collections at NERC/ZSI, Shillong was provided to Dr. Rishi Kumar,

Wildlife Trust of India, Tura, Meghalaya.

Ten students, a teacher and 8 local visitors visited the museum of the Centre.

Freshwater Biology Regional Centre, Hyderabad

Two local surveys were undertaken in Himayatsagar and Durgam Cheruvu, Hyderabad and collected aquatic insects and other faunal components for their molecular characterization. Five species of Coleoptera and 2 species of Hemiptera were identified from the collections. Besides, 6 species of fishes and 2 species of aquatic insects from the Krishnaraja Sagar reservoir were identified and added to the National Zoological Collection. Ninety identified specimens were digitized.

A scientific paper was published. The programme on "Limnological and Faunistic Studies of Palair Lake, Khammam Dist., Andhra Pradesh." was completed and the manuscript on the findings submitted for publication. Dr. Deepa Jaiswal, Scientist-C, disseminated and shared the knowledge on Molecular techniques and initiatives of DNA Barcoding with the scientific staff of the Centre and imparted an in-house training. Library

facilities were provided to Dr. Bhargavi and Dr. Srinivasulu, Asstt. Professors of Dept. of Zoology, Osmania University, Hyderabad, A.P.

Publication:

Prasanna Yennawar, Dipanjan Ray and Anil Mohapatra, 2012. First record of *Acropoma argentistigma* from Indian waters, *Marine Biodiversity Records*, 5:1 - 3.



During the In-house training on DNA Barcoding conducted by Dr. Deepa Jaiswal for the staff at FBRC/ZSI, Hyderabad

Estuarine Biology Regional Centre, Gopalpur-on-Sea

During the month, 7 species of Mollusca (Bivalvia) were identified from Pennara Estuary, Andhra Pradesh. Besides, 12 species of

mosquitoes under 2 subgenera of the genus *Anopheles* were identified. Nineteen museum specimens of fishes were digitized.



Crassostrea cuttackensis (Newton & Smith)



Saccostrea cucullata (Born)

Arunachal Pradesh Regional Centre, Itanagar

A field survey was undertaken in Doimukh, Chiputa & Gumto areas of Papumpare district of Arunachal Pradesh on 26th July and collected representative samples including planktons from 10 water bodies. Fifteen species in the National Zoological Collection at the Centre have been digitized. Fifteen school and college

students visited the museum.

Publication:

Sinha, B. 2012. *Albizia odoratissima* bark has insecticidal activity against the cabbage butterfly *Pieris brassicae*. *Proceedings of the Indian National Science Academy*, 78 (2): 151-159.

Western Ghat Regional Centre, Kozhikode (Calicut)

A field survey was undertaken in Malabar Wildlife Sanctuary, Kozhikode Dist., Kerala and 11 species of Chalcididae (Hymenoptera), 2 species of Pteromalidae (Hymenoptera), 3 species of Platygasteridae (Hymenoptera), 4 species of Ceraphronoidea (Hymenoptera), 3 species of Centipedes (Chilopoda) and 3 species of Reptilia were identified. The study included a new species under the genus *Calliscelio* (Platygasteridae: Hymenoptera). The species, *Trigonoderus pulcher* Walker (Pteromalidae: Hymenoptera) formed the first record of the genus and species from the Oriental Region and *Solenura ania* (Walker) (Pteromalidae: Hymenoptera) formed the first record of the species from Western Ghats and Kerala. Four research papers were accepted for publication and four papers communicated. Description of a new species and new records of 3 rare Pteromalidae parasitizing wood boring beetles from southern Western Ghats, Kerala and studies on Phoretic Scelioninae (Hymenoptera: Platygasteridae) from India along with description of a new species of *Mantibaria* Kirby were submitted for publication.

Dr. Muhamed Jafer Palot, Asst. Zoologist participated in the Pelagic Sea Bird Survey at the coast of Kannur and Kasaragod districts in Kerala on 7th July, organised by Malabar Natural History Society and the Kerala Birder.

During the month 8 identification & advisory services were rendered.

Dr. K. Rajmohana, Scientist-C, trained a student of Professor S. Manickavasagam from the

Faculty of Agriculture, Annamalai University, Tamil Nadu on the Taxonomy and systematics of Platygasteridae (Platygastroidea: Hymenoptera) for 3 days at WGRC, Calicut, on their request. Prof. Manickavasagam, during his visit to the Centre delivered a talk on Integrated Pest Management (IPM) and behaviour of Parasitoids.

Dr. Muhamed Jafer Palot, Asst. Zoologist delivered a talk on "Biodiversity of Western Ghats" to the students of Govt. U. P. School, Quilandy, Calicut, on 20th July at WGRC and also delivered a talk on "Mangrove Biodiversity of Kerala" at the Management Training Workshop for the Forest Range Officers of Northern Kerala at the Institute of Management in Government (IMG), Calicut, on 27th July, organized by the Kerala Forest & Wildlife Department.

A quiz programme 'Sahyadri Paithrukam Prashnothari -2012' was organised by the Centre for High School Students on 31st July, in connection with the commemoration of the declaration of Western Ghats as a World Heritage Site by UNESCO.

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 the two JRFs of the Centre and also those of two M.Sc. students from Govt. College, Madappally, Calicut, attached to the Centre for their project work.

During the month, 256 persons visited the museum.

Publication:

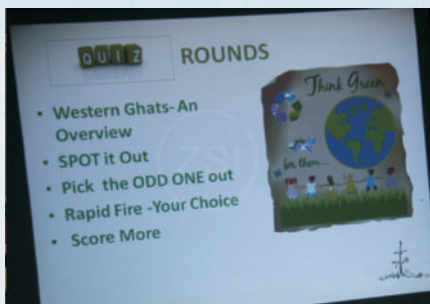
Muhammed Jafer Palot. 2012. Animal of the Month: Large Crested Tern, *Sterna bergii*. ZSI e-News. Vol.4 (6):19. June 2012.



Microgomphus souteri Fraser



Boiga trigonata Schneider



During the Sahyadri Paithrukam Prashnothari -2012 Quiz Competition conducted by WGRC on 31st July 2012



During the lecture on 'Integrated Pest Management (IPM) and behaviour of parasitoids' delivered by Prof. Manickavasagam, Annamalai University, Chidambaram, Tamil Nadu, at WGRC/ZSI, Calicut on 27th July 2012

ANIMAL OF THE MONTH

Common Red Apollo
Parnassius epaphus Oberthür, 1879



[Text & Photo: Avtar Kaur Sidhu, HARC/ZSI, Solan]

The Common red Apollo, *Parnassius epaphus* Oberthür is represented in the Himalaya at high elevations between 4, 000 and 5, 000m. above ASL. The adults fly on high Himalayan meadows and over the rocky slopes, especially during the summer season. The adults can easily be recognized from their characteristic wing shape, particularly the hindwing which is almost egg-shaped, bearing prominent red spots. The fertilized females carry a horny pouch, called 'spharagis'. It is formed from a quickly drying substance discharged by the male during fertilization. *Parnassius epaphus*

Oberthür is differentiated into four subspecies viz., *cachemiriensis* Oberthür, *hinducucia* Bang-Haas, *sikkimensis* Elwes and *hillensis* Bang-Haas in Himalaya. The *Parnassius epaphus hillensis* Bang-Haas is included in Schedule-II, Part-II of the Indian Wildlife (Protection) Act, 1972. *Parnassius epaphus hillensis* can be observed near Khardungla in Ladakh. The common red Apollos bask in sun resting on ground or stones and nectaring from wildflowers of *Potentilla arbuscula* (Rosaceae). The major threat to this butterfly in Ladakh is the tourist influx, especially at its rich habitat in Khardungla.

ZSI IN NEWS

ZSI Scientists discover new species of bird from Great Nicobar Island

<http://in.groups.yahoo.com/group/andamanicobar/message/9125>

Keepers of the Western Ghats Heritage on WGRC/ZSI, Calicut (in Malayalam)

<http://www.metrovaartha.com/2012/07/24064725/weatern-ghat20120724.html>

OUT OF THE BOX

Zebra fish Research Centre comes up at CCMB

<http://www.newsreporter.in/zebra-fish-research-centre-comes-up-at-ccmb>

Sparrows disappearing from Assam

http://zeenews.india.com/news/world-environment-day-2012/sparrows-disappearing-from-assam_778088.html

PAINTINGS FROM ZSI HERITAGE ALBUM

Wild boar

Sus scrofa Linnaeus, 1758

