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*ZSI in the 96th year of Service to the Nation
(1916 to 2011)*



Back issues of *ZSI e-NEWS*

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Headquarters, Kolkata

Extensive Field surveys were undertaken in the States of Himachal Pradesh, Orissa and also in Sajnekhali Wildlife Sanctuary, South 24 Parganas and sacred groves in Bankura district of West Bengal. Besides, local surveys were carried out in and around the wetland areas of Bortibeel, North 24 Parganas, West Bengal.

During the month, one genus and six species of Hymenoptera, *Sharqencyrtus hulbi* gen. et sp. nov., *Ixodiphagus sureshani* sp. nov., *Parencyrtomyia zedesi* sp. nov., *Rhytidothorax horticola* sp. nov., *Rhytidothorax namdapha* sp. nov. and *Rhytidothorax ramakrishnai* sp. nov. have been described as new to science. The Genus *Parencyrtomyia* Girault has been newly recorded from India and *Rhytidothorax nigrum* Singh & Agarwal, *Parablatticida brevicornis* (Dalman) and *Agarwalencyrtus dispar* Hayat are reported for the first time from Arunachal Pradesh.

Two species of Pisces, *Heteroconger tomberua* Castal & Randall (Anguilliformes: Congridae) and *Opisthognathus microlepis* Peters (Perciformes: Opisthognathidae) have been identified as new records to Indian waters. *Pomadasys guoraca* (Cuvier) has been observed for the first time from Tamil Nadu coast.

During the month, Scientists of Headquarters identified 1 species of Protozoa, 6 genera of Nematodes, 3 species of Collembola, 8 species of Diptera, 8 species of Hemiptera, 8 species of Hymenoptera, 8 species of Isoptera, 10 species of Lepidoptera, 7 species of Odonata, 2 species of Orthoptera, 10 species of spiders, 5 species of Crustacea, 33 species of Mollusca, 7 species of Amphibia, 12 species of Pisces and 4 species of Mammals from the States of Assam, Himachal Pradesh, Jharkhand, Uttarakhand, Uttar Pradesh and West Bengal. Besides, 5 species of Reduviidae and Pentatomidae bugs (Hemiptera) of Kanyakumari Wildlife Sanctuary, Tamil Nadu were also identified.

Identification and advisory services were rendered on eight lots of specimens, received from different Institutions and Organizations, besides identifying digital photos of amphibians of West Bengal, submitted by Prof. A. K. Sou, Kulti College, Bardhaman, West Bengal.

The sample of seized meat and hide received from D.F.O. Wildlife Division-I, Darjiling, West Bengal, were examined and confirmed as of Spotted Deer, *Axis axis* (Erxleben) and two antlers received from D.F.O. Cooch Behar Division, West Bengal were examined and confirmed as of Sambar, *Cervus unicolor* Kerr.

During the month, four research papers were published, nine papers accepted and eight papers submitted for publication.

Sri S. S. Jawahar, IAS, Commissioner of Museum, Govt. of Tamil Nadu, Chennai, visited different sections of Headquarters during the month. Dr. Sudesh Batuwita, Research Assistant, Institute of Fundamental Studies, Sri Lanka; Dr. Neelesh Dahanukar, IISER Fellow, Indian Institute of Science Education & Research, Pune, Maharashtra; Dr. Shrikant S. Jadav, WRC, ZSI, Pune; Ms. Swagata Mondal and Ms. Payal Dutta Roy, Department of Zoology, Calcutta University, Kolkata, visited different sections of the Headquarters for studying faunal specimens. Scientific guidance was rendered to Mrs. Deepshikha Mondal, Bethune College, Kolkata, on termites of Kolkata.

Dr. V.V. Gantait attended the "Brain Storming Session and Awareness Programme on Plant Protection" and also delivered a lecture on "Status Report on Nematode Fauna in Eastern India" during 6th-7th July, at Bidhan Chandra Krishi Viswavidyalay, Kalyani, Nadia.

Dr. J. K. De, Scientist-D delivered a lecture in the 'Sensitization-cum-training programme on prevention of wildlife crime' for Police Officers of Murshidabad & Nadia District, West Bengal

during 7th - 8th July, 2011 at Berhampore, Murshidabad, organized by WCCB, Govt. of India.

Dr. Animesh Bal, Scientist-F attended a meeting on the development of Marine Museum and modernization of the Marine Aquarium MARC, Digha under the Integrated Coastal zone Management Project, West Bengal, at the Institute of Environmental studies and Wetland Management on 19th July.

Dr. Basudev Tripathy, Scientist-C participated in the "Stakeholders Workshop on Tracking Olive Ridley Turtles in Bay of Bengal" held at Bhubaneswar on 20th July, organized by Wildlife Institute of India, Dehradun.

Shri K.C. Gopi, Scientist-E, attended the one day workshop on "Museum: Establishment, Development, Sustenance", organized by the Geological Survey of India, Central Headquarters, Kolkata on 20th July and also made a power point presentation on 'Museum: Establishment, Development, and Sustenance with special reference to Coral Reef Ecosystem'.

Dr. Kailash Chandra, Scientist-F and Dr. K.A. Subramanian Scientist-C participated in the International Seminar on "Global Environmental Disaster Management: Law and Society" held on 22nd-24th July, at Vigyan Bhavan, New Delhi.

Dr. A. K. Sanyal, Scientist-F attended the Quiz Competition held on 30th July at Aranya Bhawan, Kolkata.

Shri Bulganin Mitra, Scientist-B and Dr. Ch. Satyanarayana, Asst. Zoologist attended the "First National Level Meeting on Sundarbans under the Bay of Bengal Large Marine Ecosystem (BOBLME) Project", held on 23rd July at CIFRI, Barrackpore.

Mrs. Abha Sar, Sr. Zool. Asst., participated in the National Workshop on Scanning Electron Microscopy at University of Burdwan, during 26th-29th July.

Dr. K.A. Subramanian, Scientist-C participated in the working group meeting on "Ecosystem



Blue whistling Thrush

Resilience, Biodiversity and Sustainable Livelihood for formulation of 12th Five Year Plan" at Yojana Bhavan, New Delhi on 29th July.

The Training Programme '10th Advanced Computer Applications for Administrative Personnel of the S&T Departments, Government of India' was attended by Sri Swapan Kr. Das, Office Supdent., Sri Mukta Nanda Parui, Store Asstt., Sri Rabin Kayal, L.D Clerk, Sri Mahadeb Pal, Steno. Gr. III, Sri Notan Bhusan Kar, Asstt. Office, Sri Mihri Kanti Biswas, Asstt. Office, Sri Dipen Kr. Saha, U.D. Clerk, Sri Suklal Dutta, U.D. Clerk, Sri Kallol Neogi, U.D. Clerk, Sri Shyamal Bhattacharya, U.D. Clerk and Sri Sukamal Das, L.D. Clerk, from 18th-22nd July, at IIPA, New Delhi.

Dr. K. Venkataraman, Director, Zoological Survey of India attended following meetings:

DPC meeting at the Ministry of Environment & Forests, New Delhi on 11th and 15th July; meeting at Zoological Society, Kolkata on 14th July; Golden Jubilee celebration of Southern Regional Centre, ZSI, Chennai on 22nd July and a meeting at the Ministry of Environment & Forests, New Delhi on 28th July. He also delivered a lecture at the Science College, Kolkata on 19th July.

Publications:

1. Girish Kumar, P. and Narendran, T.C. 2010. Eucharitid wasps. Electronic publication. Website: <http://zsienvic.nic.in/month.htm>.

2. Gore, A.P., Paranjpe, S.A., Joshi, C., Pramod, P., Subramanian, K.A., Daniels, R.J.R. and Gerow, K. 2011. Adaptive Sampling Strategy for Assessment of Avian Biodiversity. *International Journal of Statistical Sciences*, 11 (Special Issue): 1-17.
3. Hayat, M. and Kazmi, S.I. 2011. On some Encyrtidae (Hymenoptera: Chalcidoidea)

from Namdapha Tiger Reserve in Arunachal Pradesh. *Zootaxa*, 2830: 1-19.

4. Mitra, B. 2011. A report on the bioecology of the Giant Red bug *Macrocera (Lohita) grandis* (Gray) [Family Pyrrhocoridae] and its conservation in the Bhibhutibhusan wildlife sanctuary, Parmadan, West Bengal. *The Indian Forester*, 137 (6): 739-743.



Polypedates maculatus



Pomadasys guoraca



Tenth Advanced Computer Application for Administrative Personnel of the S & T Dept., Govt. of India (July 18-22, 2011), IHPA, New Delhi	
Standing 2 nd Row L to R	S/Shri Amit Mudaliar, Notan Bhusan Kar, Sukamla Das, Rabin Kayal, Shyamal Bhattacharya, Dipen Kr. Saha, Suklal Dutta, Kallol Neogi, Vishal Mudgal, Mahadeb. Pal , Shiv K.Mishra
Standing 1 st Row L to R	S/Shri U.B. Mestri, Tushar Nirmalkar, Prashant R. Kathane, Mihir Kant Biswas, Swapan Kr. Das, Madhav Chouganjkar, R.N. Sahoo, R.P. Meena, B. Balaswamy, M.N. Pauri, Ms. Alka Jindal
Sitting Row L To R	Ms.Sunanda, Salonkar , Mr. Anand Pandit, Mr. Rajneesh Asthana,(Guest Faculty) Prof. Bharati Sharma, (Convener DST) Dr. Rakesh Hooja,(Director, IHPA), Shri. S.R. Das.(Programme Coordinator), Dr. Sujit Kumar (Programme Coordinator),Mr. P.G. Kelapure Ms. Shashikala Gundmi

During the Training Programme '10th Advanced Computer Applications for Administrative Personnel of the S&T Departments, Government of India'

Marine Biology Regional Centre, Chennai

A deep sea faunal survey was carried out for six hours in a trawl boat, off Chennai coast during the month and representative faunal samples collected. Two species of sea grass associated foraminiferans, 4 species of testate Amoeba, 5 species of marine Sponges, 6 species of Crustacea, 22 species of Mollusca, 16 species of echinoderms and 15 species of marine fishes were identified out of the materials collected from the Gulf of Mannar Marine Biosphere Reserve. Identification services were rendered on 2 species of molluscan shells and 2 species of

scleractinians for SHO, Darya Ganj, and D.B.G. road Police Stations, Delhi, respectively. Various ornamental fishes were added to the aquarium. Two research papers were submitted for publication. Dr. C. Venkatraman, Scientist-C & Officer-in-Charge, attended the Institutional Animal Ethics Committee (IAEC) meeting at Stanley Medical College, as a CPCSEA member and GLR laboratories Pvt. Ltd., Madhavaram as a scientific member. Seven hundred and eighty one students and tourists visited the marine aquarium during the month.



Trawl operation in a boat, off Chennai coast



Specimens captured during the trawl operation



The nudibranch *Kalinga ornata*, with its egg mass



Egg mass of Sepia

Southern Regional Centre, Chennai

During the month, the following seven faunal groups from Southern Eastern Ghats viz. Protozoa: 4 species, Rotifera: 5 spp., Cladocera: 10 spp., Ostracoda: 2 spp., Lepidoptera: 18 spp., Fishes: 9 spp. and Reptiles: 5 spp. were

identified and added to the faunal depository. One research paper was published. Seven manuscripts were refereed for three outside journals including two foreign journals. The staff of SRC & MBRC conducted a one day

Programme on Awareness of Biodiversity as part of the Golden Jubilee Celebrations of SRC on 22nd July. The function was attended by around 700 persons including 500 school children from three districts of Tamil Nadu and Scientists from various organisations. Around 250 students took part in the various competitions. The function was inaugurated by Dr A. K. Ghosh, former Director, ZSI. He released four brochures viz. "Zoological Survey of India", "Reptiles of India", "Rare and Endemic Mammals" and "Invasive Alien Fauna of India". A facilitatory lecture was delivered by the Guest of Honour Shri A. S. Balanathan, IFS, PCCF, Dept. of Forests, Tamil Nadu. Three Conservation Awards were given by Shri. Jiwan Dass, Director (CS-11), MOEF, New Delhi, to Shri B.Vijayaraghavan, I.A.S. (Retd), Chairman Snake Park, Chennai, Shri Romulus Whitaker, Founder Director, Madras Crocodile Bank Trust & Dr. Supraja Dharani, Director, TREE.

The Chief Guest Dr. A. K. Ghosh also inaugurated the exhibits on "Biodiversity" displayed by the school students. Painting and Oratorical competitions were held and prizes were given away by Dr. K. Venkataraman, Director, ZSI and other special invitees viz. C. Radhakrishnan, Scientist-F & Officer-in-Charge, WGRC/ZSI, Calicut, Dr A. K. Sanyal, Scientist-F, ZSI, Kolkata. Dr. Dhriti Banerjee, Scientist-C compered the programme. The staff of SRC in general and especially Dr S. Prabakaran, Scientist-C were instrumental in organizing the school events and the other preparations with the active involvement of Shri Shivasamy, Dr R. Aengals and Shri Pushpavel.

Publication:

Aengals, R, 2011. A note on the food habits of the Checkered Keelback water snake *Xenochrophis piscator* (Schneider, 1799). *Cobra*, 5(1):14-15.

During the Golden Jubilee celebrations of SRC/ZSI, Chennai





Freshwater Biology Regional Centre, Hyderabad

A field survey was conducted in the man-made multipurpose raw water reservoir, Cumbum Lake with a water spread area of 28 km² in Prakasam District, South Andhra Pradesh and representative fauna of major groups (Vertebrate *nekton*-freshwater fishes, decapod crustaceans, aquatic insects *etc.*,) were collected from over 10 significant sampling sites, besides collecting zooplankton/littoral water samples.

Four short duration field surveys were conducted in varied urban and semi-urban aquatic ecosystems for inventorying species composition of various major plankton groups and for analysing the lake water quality, covering 6 small sized irrigation and 2 raw water reservoirs, besides 2 temporary water bodies. The study of rotifer species has brought out information on 7 spp. for the first time from



During the faunal survey conducted in Cumbam Lake, Andhra Pradesh

Andhra Pradesh. Systematic screening and taxonomic identification of rotifer collections from different aquatic ecosystems yielded additional 9 taxa, raising the total number of rotifers recorded to 52 species. 41 fish species from Bhudabalang estuary, Balasore Dist., Odisha were also identified. Five spp. of freshwater fishes and 5 spp. of freshwater Cladocera were digitized. Two enquiries received, one on freshwater aquaria and another on endemic ornamental and cave fishes, have been attended to. Dr. Deepa Jaiswal, Scientist-C and Dr. S.V.A. Chandrasekhar, Asst. Zoologist delivered invited talks on “Wetlands & Entomofaunal



Sphaeridium dimidiatum (Hydrophilidae) and
Sandracottus mixtus (Dytiscidae)

diversity” and “Freshwater Ecosystem” respectively, at Lotus National School, Attapur, Hyderabad.

Western Regional Centre, Pune

During the month, 22 species of Mollusca, 8 species of Orthoptera, 5 species of Reptilia, 4 species of fresh water crabs, 3 species of Odonata and 1 species of Collembola were identified. One research paper was published and seven papers were submitted during the month. Researchers from the Dept. of Zoology, Dr. B. A. M. University, Aurangabad and Shivaji University, Kolhapur visited the Centre. 180 students from the CMS English Medium School, Pune, visited the museum on 13th July.

Dr. R.M. Sharma, Scientist-D & Officer-in-Charge, and Dr. P. D. Rane, Assistant Zoologist attended the half yearly meeting of the Nagar Rajbhasha Karyanwayan Samiti, Pune on 25th July at N.C.L., Pune.

Publication:

Bhatnagar, P. S. and Mathur, R. 2010. (Published, 2011). Behavioural observations on free-ranging *Rhesus* to *Python* dummy. *Tigerpaper*, 37 (3):17-19.



Trimeresurus malbaricus



Chamaeleo zeylanicus



Mesobuthus sp. carrying young ones



A Velvet mite, *Trombicula* Sp.

North Eastern Regional Centre, Shillong

During the month, 3 species of Pisces, 2 species of Amphibia and 2 species of Aquatic Hemiptera were identified from the back log collections present in the Centre. The earthworm specimens collected during the previous survey to West Khasi Hills District, Meghalaya, were identified in to two families and three genera. The manuscript on the *Pictorial Hand book on fishes of North East India* is under finalisation. 1 research paper was published.

Laboratory facilities were provided to Dr. S.D. Biju and Ms. R. G. Kamei, Department of Environmental Biology, University of Delhi, Delhi from 5th - 8th July, to study the amphibian

type specimens deposited at the Centre. Laboratory facilities were also rendered to two research scholars of the Zoology Department, Gauhati University, Assam from 13th - 15th & 22nd July, to study the amphibians and reptiles preserved at the Centre.

Mrs. J. Lyngdoh, Scientist-C, assumed the duties of the Officer-in-Charge of the Centre w.e.f. 12th July.

Publication:

Sen, N and Khyrnriam, D. 2010. First Record of *Glaridoglanis andersonii* (Day, 1870) (Siluriformes: Sisoridae) from India. *Rec. zool. Surv. India*, 110 (4): 69 - 71.



Glaridoglanis andersonii (Day, 1870) - First record from India



Arunachal Pradesh Regional Centre, Itanagar

Due to the heavy monsoonic conditions, field surveys could not be undertaken. However, the identified Orthoptera (Tettigonidae) collection

at the Centre was assigned with registration numbers.

Estuarine Biology Regional Centre, Gopalpur-on-Sea

During the month, 6 species of Mollusca and 5 species of mosquitoes were identified from the unidentified collections of the Centre. Identification and advisory services were provided to a research scholar of Brahmapur University, Odisha. Dr. D. V. Rao of FBRC/ZSI, Hyderabad, visited the Centre and identified a total of 63 species of fishes from the collection of Bhudabalanga estuary, Balasore District, Odisha.

Dr. L. Kosygin Singh, Scientist-C and Officer-in-Charge of the Centre attended the Steering

Committee meeting on the Similipal Biosphere Reserve in the Secretariat of Government of Orissa, Bhubaneswar on 14th July and the Sea Turtle Satellite Telemetry Stakeholders' Workshop organized by the Wildlife Institute of India, Dehradun at Bhubaneswar on 20th July. Dr. L. Kosygin Singh also delivered an invited talk on the "Wetlands of India and Role of Youths in Conserving the Wetlands" in the Aquinas College, Gopalpur-on-Sea, Odisha on 23rd July.

Central Zone Regional Centre, Jabalpur

The backlog collections of 17 species of Coleoptera, 28 species of Hemiptera, 9 species of Arachnida, and 7 species Lepidoptera (moths) were identified and registered from Singhori Wildlife Sanctuary, Madhya Pradesh (M.P). A faunistic survey was undertaken in Veerangana Durgawati Wildlife Sanctuary, (M.P) from 17th-24th and collected representative faunal samples of 16 faunal groups. A list on Endemic species of Indian Mammals was prepared and submitted. Identification service was rendered to the Tiger Strike Force, Jabalpur (M.P.) on the confiscated live Indian Vulture, *Gyps indicus* (Scopoli) and Indian soft shelled turtle, *Lissemys punctata* (Lacepede), brought to the Centre, for identification. Eight B.Sc

students from St. Aloysius College, Jabalpur and 9 M.Sc. students from Home Science College and St. Aloysius College, Jabalpur enrolled for their Internship at the Centre for a period of two months. Scientific guidance has been imparted to these students on the role of Taxonomy in biodiversity conservation and studies related to the various biological parameters of some insect groups such as Lepidoptera, Coleoptera, Orthoptera, Hemiptera, Odonata and as well on smaller mammals. Two students from RDVV, Jabalpur completed their M. Phil dissertation work entitled, 'Studies on the biology and life-cycle of *Tarucus extricatus* (Butler) (Lepidoptera: Lycaenidae) and Insect Diversity of ber plant,

Confiscated live specimens received for identification from the Tiger Strike Force, Jabalpur



Indian Vulture, *Gyps indicus*



Indian soft shelled Turtle, *Lissemys punctata*

Zizyphus jujuba (Mill.) of District Jabalpur (M.P.)', under the supervision of Dr. Kailash Chandra, Scientist-F. Dr. S. S. Talmale, Assistant Zoologist of the Centre attended the half-yearly meeting of Nagar Rajbhasha Samiti on 12th July at Jabalpur. Dr. S. Sambath, Scientist-C & Officer-

in-Charge attended the meeting of the seventh State Wildlife Board, Madhya Pradesh on 28th July, at Bhopal. A manuscript entitled the spiders of the States of Madhya Pradesh and Chhattisgarh was submitted for publication.

Gangetic Plains Regional Centre, Patna

During the month, 11 species of moths were identified. One research paper was published. Dr. Gopal Sharma, Scientist-C and Officer-in-Charge has been nominated as a member of the Dolphin Conservation Task Force, duly constituted by the Department of Forests, Govt. of Bihar. Dr. Gopal Sharma, attended the one day seminar on CPWD day in Vigyan Bhawan, New Delhi on 12th. A Junior Research Fellow from the Department of Biotechnology, Indian Institute of Technology, Guwahati, Assam, visited the Centre to gather information to develop a Ganga basin management plan as per

the mandate of the National Ganga River Authority.

Two research scholars of Patna University visited the GPRC museum for identification of molluscan specimens. 19 school students and 5 University students also visited the museum.

Publication:

Nesemann, H., Sharma, G., & Sinha, R. K. (2011) Benthic macro-invertebrates fauna and "marine elements" sensu Annandale (1922) highlight the valuable dolphin habitat of River Ganga in Bihar. *Taprobanica*, 3(1): 18-30.



Cretonotus transience Walker



Spilarctia oblique Walker



Olepa ricini Fabricius

Desert Regional Centre, Jodhpur

During the month, 5 species of Nematoda, 5 species of Lepidoptera, 6 species of Odonata and 3 species of Pisces were identified from different environs of Rajasthan. Two research papers were published. 100 entries were made in the faunal database. 87 library entries were made in the library database, employing the software *e-granthalaya*. Nine species of Lepidoptera, 4 species of Odonata, 4 species of Pisces, 3 species of Amphibia and 3 species of Reptilia were digitized.

Dr. Padma Bohra, Scientist-D and Dr. Gaurav

Sharma, Scientist-C participated in the *AFRI Stakeholder meeting* at Van Bhavan, Jaipur on 6th July. Dr. Gaurav Sharma, Scientist-C participated in the meeting of the State Board for Wildlife, Gujarat at Sachivalaya, Gandhinagar on 10th July. Dr. Padma Bohra, Scientist-D, Dr. Gaurav Sharma, Scientist-C, Dr. Sanjeev Kumar, Scientist-C and Dr. Ram Sewak, Scientist-B attended the Centenary celebrations of ICMR on the occasion of Inaugural function of "Pearl Millet Project Results Dissemination" Conference at Desert Medicinal

Research Institute (DMRC), Jodhpur on 14th July. Dr. Padma Bohra, Scientist-D attended the Silver Jubilee function of Central Administrative Tribunal, Jodhpur on 28th and participated in an interactive session. Dr. Gaurav Sharma, Scientist-C and Dr. Ram Sewak, Scientist-B attended a meeting with Shri Prem K. Kalra, Director, IIT, Jodhpur on 29th and a report on Faunal Composition was submitted.

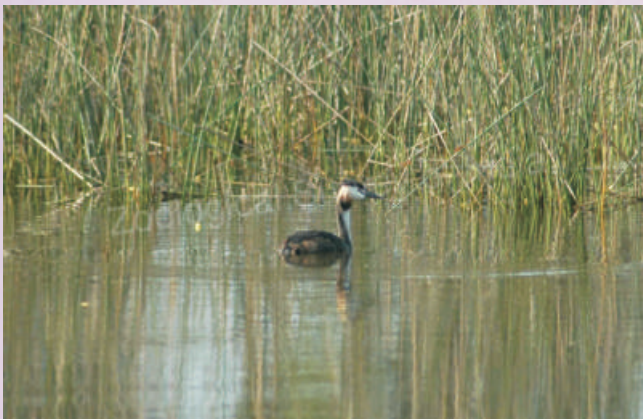
Publications:

1. Sharma, G. 2011. Studies on Lepidopterous insects associated with vegetables in Aravalli Range, Rajasthan, India. *Biological Forum- An International Journal*. 3(1): 21-26.
2. Sharma, G. 2011. Systematic studies, Life history and Infestation by *Helicoverpa*

armigera (Hubner) (Lepidoptera: Noctuidae) on Tomato in Semi Arid Regions of Rajasthan. *Biological Forum- An International Journal*. 3(1): 52-56.



Black Bucks at Sardar-samand Resrvior



Great Crested Grebe at Khijadiya Bird Sanctuary



Indian Giant Flying Squirrel in a tree hole at Sitamata WLS



Spotted Dove at Sitamata WLS



White-necked Stork at Sitamata WLS

Andaman and Nicobar Regional Centre, Port Blair

Faunal surveys were conducted in the marine ecosystem of Rutland Island, South Andaman during 15th-16th July and a total of 120 species of scleractinian corals, 3 species of gorgonians, 7 species of echinoderms, 10 species of nudibranchs, 1 species of polyclad, 16 species of gastropods and 28 species of butterflies were identified. Among the species identified, the nudibranch *Aplysia parvula* Guilding in Morch, 1863 is a new record to India. Besides, 82 specimens of corals, 1 specimen of gorgonian 145 specimens of opisthobranchs and 30 specimens of butterflies were registered in the National Zoological Collection of the Centre while 20 specimens of insects were pinned. Three research papers were published. Manuscripts on Faviids of Andaman and Nicobar Islands, and Gorgonids of Andaman and Nicobar Islands have been submitted for publication. Project proposals on National Coral Reef Research Centre (five year plan), a workshop on Indian Marine Invertebrates, ecology and population dynamics of Coconut crab in A&N Islands, and ecological study on bird hazards at Airports in A&N Islands have been submitted to ZSI Headquarters for onward transmission to funding agencies. A project proposal on coral reef ecosystem received from the MoEF was reviewed and comments offered.

Publications:

1. Madhan Chakkaravarthy, V. and C. Raghunathan, 2011. Assessment of microbial disease on corals and its prevalence in Andaman Islands. *Research Journal of Science and Technology*, 3(2): 65-69.
2. Madhan Chakkaravarthy, V., C. Raghunathan and K. Venkataraman, 2011. Diversity and distribution of scleractinian corals in Mayabunder region of North Andaman, India. *Scientific Transaction in Environment and Technovation*, 4(4): 168-173.

3. Sivaperuman, C. and E.A. Jayson, 2011. Seasonal changes of the bird community in the Vembanad-Kole Ramsar site, India. *Scientific Transaction in Environment and Technovation*, 4(4): 177-182.



Oriental White-eye, *Zosterops palpebrosus*



Oriental Magpie-Robin, *Copsychus saularis*



Andaman Coucal, *Centropus andamanensis*

*Cypraea annulus**Cypraea nebritus**Conus striatus* Hwass in Bruguiere 1792*Cypraea (Monetaria) moneta**Cypraea (Ponda) carneola*

High Altitude Regional Centre, Solan

A field survey was conducted in Chail Wildlife Sanctuary, Himachal Pradesh and representative fauna of eight animal groups collected/observed. 50 photographs were taken during the survey. Six species of Lepidoptera (moths) and 8 species of Orthoptera were identified during the survey. From the collection made from the Kalatop Khajjiar Wildlife Sanctuary, and Kalesar National Park, 4 species of Insecta: Rhopalocera and 3 species of Pisces respectively were identified. Dr. A. K. Sidhu, Scientist-C &

Officer-in-Charge and Dr. Indu Sharma, Scientist-C, acted as Guest of honour in the book release ceremony 'Urdu Style Manual' by Urdu Teaching and Research Centre, Solan, on 8th July. A meeting of local members of the Official Language committee was held at the Centre to implement the official language in routine work. Two research papers were published.

Publications:

1. Sharma, Indu and Sidhu, A.K. (2011) Review and present observation on the sighting of

Black-necked crane, *Grus nigricollis* Praheylsky from Ladakh (Jammu & Kashmir, India). *Biological Forum* 3 (1): 87-90.

2. Kumar, A. (2011). Physical characteristics, categories and functions of song in Indian Robin *Saxicoloides fulicata* (Aves: Muscicapidae). *Journal of Threatened Taxa*, 3(7):1909-1918.



Oedaleus abruptus (Thunberg) in Chail WLS

Sunderban Regional Centre, Canning

A Field survey was conducted in the Canning landing centre and Dabu. A total of 36 specimens pertaining to Pisces, Crustacea and Mollusca were collected. 7 species of fishes

were identified and registered. A meeting in connection with the Official language (Hindi) implementation Policy and a debate competition was conducted at the Centre.



Sale of *Scylla serata* at the Canning fish Market



Scylla serata ready for transporting



Abundance of clupeids in Canning landing centre



Traditional fishing at Matala River, Canning

Marine Aquarium cum Regional Centre, Digha

The aquarium received an average of 265 visitors per day during this month. Around 142 examples of live marine ornamental animals were exhibited in aquarium tanks. The major attractions among the aquarium exhibits

during the month were Bengal Sergeant (*Abudefduf bengalensis*), a group of puffer fishes (*Chelanodon* sp.) and Carangids (*Caranx* sp.). Apart from the aquarium maintenance, 108 examples of fishes and invertebrates were

collected through local surveys, of which 96 were identified. From the former collections, 7 species of fishes were also identified. The collection during the month mainly comprised of Bearded multi-barbata (*Brotula multibarbata*), Yellow backed sergeant (*Abudefduf vaigensis*), Indian Hand fish (*Haliutaea indica*), Yellowback fusilier (*Casio xanthonota*),



Blacktip Soldierfish, *Myripristis melanostics*



Darkstriped Squirrelfish, *Sargocentron parslin*



Indian Hand fish, *Haliutaea indica*



Fivelined snapper, *Lutjanus quinquelineatus*

Northern Regional Centre, Dehra Dun

Three intensive surveys were undertaken under the programme 'Fauna of Dehradun District' and representative fauna belonging to 10 faunal groups collected, besides collecting 8 exs of helminth parasites from amphibia and soil nematodes from soil samples. Field observations were made on 19 species of birds and 7 species of mammals. Ten species of butterflies from Dehradun district, 11 species of soil nematodes from Haryana and 4 species of helminths from Jhilmil Jheel Conservation

Reserve were identified. Permanent slides of hair medulla of two species of Lagomorpha (*Lepus arabis* and *Lepus nigricolis*) and one species of Sciuridae (*Petinomys fuscocapillus*) were prepared for Trichotaxonomic studies. Permanent slides of 40 examples of helminth parasites from amphibia were prepared for identification.

Shri P.T.Bhutia, Scientist-F & Officer-in-Charge, attended the third meeting of the Punjab State Wildlife Board on 19th July, at the

residence (Chandigarh) of the Chief Minister of Punjab. Dr. P. C. Tak, Scientist-D reviewed a manuscript on wetland birds received from an outside journal. Dr Vinod Khanna superannuated from the post of Assistant



During a field Survey at Korba, Dehradun Dist.

Zoologist, on 31st July 2011, after having served the department for over 38 years and as well making significant contribution to science, particularly in Taxonomy and Ecology of Centipedes.



Hanuman Langurs observed at Sahiya, Dehradun Dist.

Western Ghat Regional Centre, Kozhikode (Calicut)

A new species of Hymenoptera, *Paridris spinosus* Rajmohana (Platygastridae) from Palakkad, Kerala was described and a research paper dealing with the new species, published. The Oriental subfamily *Eunotinae* (Hymenoptera: Chalcidoidea: Pteromalidae) comprising of 8 genera was revised based on the collections received for identification from the Department of Entomology, Annamalai University, Tamil Nadu and from field surveys. The revision included a new species from the Malabar Wildlife Sanctuary, Kerala and record of a species for the first time from the Oriental Region. Besides, 2 species of Odonata (Insecta) and 6 species of Centipedes (Chilopoda: Scolopendromorpha), including a new species were identified.

Two research papers dealing with new species of Amphibia from Western Ghats have been accepted for publication. Three research papers were submitted.

Five identification and advisory services were rendered to the students and Forest officials. Dr. P. M. Sureshan, Scientist-C supervised the work of a JRF of the Centre.

Dr. K. Rajmohana, Scientist-C supervised the research projects of two JRFs of the Centre as

well as the three M.Sc. students from Chittur Govt. College, Palakkad and Kannur University (Attached to the Centre) for their project work.

Mrs. K. G. Emiliyamma, Scientist-C, attended a two days' training programme on CPSMS software and accounting to manage the fund from MoEF to AICOPTAX project at ZSI, Calicut, organized by the PAO, New Delhi, at ZSI, Calicut.

Mr. Bijoy. C, and Ms. Dhanya Balan, Junior Research Fellows of the Centre, delivered lectures on the faunistic novelties of Western Ghats to the upper primary school students of the St. Joseph's Anglo-Indian Girls school, Kozhikode, on 19th July at WGRC, ZSI, Calicut.

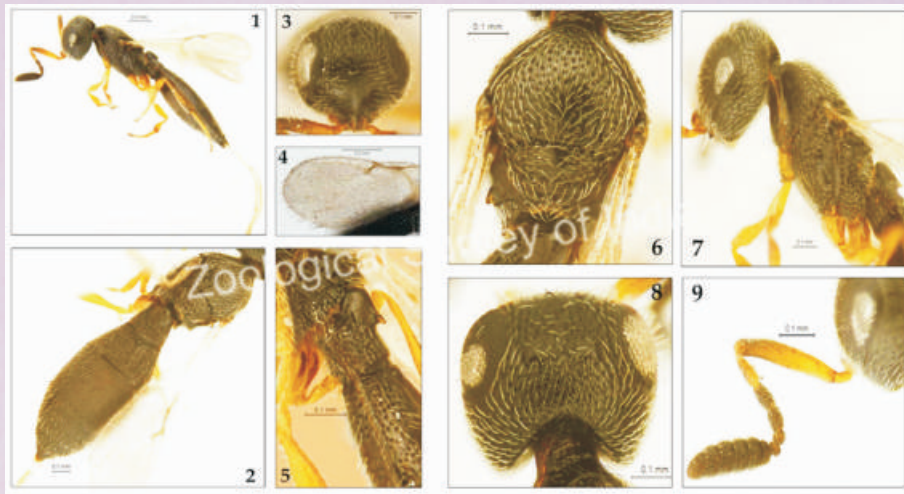
A draft Vision Document (*Vision 2020*) for ZSI was prepared by C. Radhakrishnan, Scientist-F and K. Rajmohana, Scientist-C.

During the month, 469 visitors paid their visits to the museum.

Publication:

K. Rajmohana and C. Bijoy. 2011. A new species of *Paridris* Kieffer (Hymenoptera: Platygastridae) from India. *Hexapoda* 18(1): 9-12.

New Discovery



Paridris spinosus Rajmohana sp. nov. (Hymenoptera: Platygasteridae)



During the study tour of the students of St. Joseph's Anglo-Indian Girls school, Kozhikode to WGRC/ZSI, Calicut

ANIMAL OF THE MONTH

The Kollegal Ground Gecko
Geckoella kollegalensis (Beddome, 1870)



[Text & Photo: Dr Muhamed Jafer Palot, Western Ghat Regional Centre, Zoological Survey of India, Calicut]

The genus *Geckoella*, is endemic to India and Sri Lanka and is represented in India by five

species namely, *G. deccanensis*, *G. albofasciata*, *G. nebulosa*, *G. jeyporensis*, and *G. kollegalensis*. They

are terrestrial, nocturnal or crepuscular, forest dwelling and secretive in habits and are least known among the Indian geckos.

The Kollegal Ground Gecko, *Geckoella collegalensis* (Beddome) is a medium sized terrestrial gecko attaining an average snout to vent length of about 52 mm. It is a colourful, ground dwelling gecko. Body is stout, cylindrical and covered with small, granular scales; tail is short and tapering (regenerated tail being turnip-shaped), with 11 dark brown bands; its dorsum is with 5 pairs of large dark brown spots, in addition to the 3 pairs on the head. The species inhabits deciduous and scrub forests adjoining rocky formations or near wetlands. It is crepuscular and prefers to move along forest pathways at dusk time, foraging among the leaf litter and hides among the rocks or leaf litter during day time. It feeds on insects such as termites. In captivity it feeds on a

variety of insects like cockroaches, grasshoppers, crickets, nymphs of mantids as well as meal worms and spiders.

Beddome (1870) described this species as *Gymnodactylus collegalensis* based on a single specimen collected from Balarangams (in the old Kollegal State), Chamrajnagar district, Karnataka State. The species is widely distributed all along the western Peninsular India from Gir forests in southern Gujarat State, south through Maharashtra, Karnataka, Kerala and Tamil Nadu States. Recently the species has also been reported from Madhya Pradesh.

Its egg clutch comprises of two eggs, produced in August, which hatches in October. Incubation period is about 43 days. The species is listed as 'Data deficient' as per the 'Conservation Assessment and Management Plan for Reptiles of India' (Molur & Walker, 1998).

ZSI IN NEWS

Three conservationists honoured

<http://www.thehindu.com/news/cities/Chennai/article2287476.ece>

OUT OF THE BOX

ISRO prepares first national inventory of wetlands

<http://www.thehindu.com/news/national/article2119785.ece>

http://moef.nic.in/downloads/public-information/NWIA_National_brochure.pdf

PAINTINGS FROM ZSI HERITAGE ALBUM



The Kashmir Stag or Hangul
Cervus elaphus hanglu Wagner, 1844

SPECIAL ARTICLE

LOOKING BACK, LOOKING FORWARD

The Zoological Survey of India (Z.S.I), established on 1st July, 1916, is perhaps the only organisation of its dimension in today's World. Started in the premises of the Indian Museum, Kolkata (estd 1814), the survey department, the fifth in the line of surveys started by the Imperial Government under the British rule, was given the mandate to cover the entire British Indian Empire with only four scientists and seven staff. The first Director of the survey Dr. Thomas Nelson Annandale fought relentlessly as Assistant Curator of Zoology and Anthropology of the Indian Museum, with the Imperial Government arguing on the necessity of such an organisation to document the vast animal resources of the country, in the same line as that of the Geological Survey of India (G.S.I)



Dr. A. K. Ghosh

Director, Centre for Environment and Development (CED), Kolkata
&
Former Director, Zoological Survey of India, Kolkata.

for geological resource and the Botanical Survey of India (B.S.I) for botanical resource.

The survey department has grown over the years, especially after Independence, more so after 1960. The data generated by the Scientists of the Survey helped the Government to initiate Central Inland Fisheries under Govt. of India; the information on the Agricultural pests of Economic Crops, besides their parasites and predators, helped the scientists in the country to organise pest control strategies for food security. The work of Z.S.I in the field of Malaria and Kala Azar, both with relation to the pathogen and vectors, helped Public Health Administration. special report on the spread of Plague in 2nd World War Indo Burma front carried out by Dr. M. L. Roonwal, one of the former Directors, demands separate mention. Z.S.I played a key role as a Scientific Authority on Wildlife Management since the inception of Indian Board on Wildlife, advising Government on the identification of Endangered and Threatened species that need conservation. Z.S.I has over the years helped numerous researchers from India and abroad by way of providing identification services and other relevant information.

Unfortunately, very often, I have heard that Z.S.I. is NOT a revenue earning department. As modern economics has accepted the concept of NET PRESENT VALUE (NPV) in terms of both goods and services, the value of this unique organisation perhaps can be most well established if one cares to look into the contributions of this Survey during the last 96 Years. In the era of U N Convention on Biological Diversity (CBD) which sustain Human Society, Z.S.I and B.S.I provided an Assessment of Indian Biological Diversity, paving way for India to be recognized as one of the Megabiodiversity countries in today's world. The country should feel proud of Z.S.I, appreciate its real value and help to forge ahead with adequate support for capacity building

specially to meet International and National obligations for Biodiversity Conservation and assist to translate the Biological Diversity Act, 2002, into real action.

The data generated by the Scientists of Z.S.I on marine biological resources later led to the Central Marine Fisheries Research Institute (CMFRI) under the CSIR, which in turn perhaps inspired the formation of the Fishery Survey of India, estimating the average exploitable stock in the east and west coast of India. This again reinforces the seminal role the survey has played towards economic development of India.

The concept of ecosystem services has now been recognized by the economists. Wildlife Tourism or Ecotourism under a regulatory system can help both local community and the government to generate revenue and improve livelihood condition. The existence value of any keystone species in a particular area was first recorded by the survey scientists and they even provided the distribution range for such species. This data has later been rightly utilised by the Management Authorities in the State Forest Departments. People visit such areas with expectation to see such keystone species, say Tiger in the Sundarbans, and may be one in 10,000 actually sees a Tiger but even then people spend travel time and incur expenses benefiting local community; one such classic case study from Sundarbans shows a very positive response even for repeat visits. If Sundarbans is to be declared a No Tiger Area, one can easily guess the consequences. Same is true for Birds in the Chilka Lake or Dolphins in Satpara or Marine Turtles in Odisha beach. One has to appreciate the role of Z.S.I providing Wildlife Survey data as the National Scientific Authority while appreciating the role of the Forest Department as the Management Authority.