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ZSI in the 99th years of Service to the Nation (1916 to 2014)

FROM THE DIRECTOR'S DESK

The year 2013 was fruitful to ZSI in many ways. I am confident that the young scientists those who have joined the department in the recent years will contribute much in terms of unravelling many new species to science through their publications in peer reviewed journals. As you all know, the quality of scientists is judged only by their publications in quality journals that are recognised world over. Apart from describing new species to science, it is pertinent that one takes up the revision of his or her animal group of interest at a reasonable period of his or her career, instead of taking up this task at a much later stage. I agree that, revisionary work involves lot of experience and hard work, but nothing harm in aiming for something big in the middle of the

career. I have requested the scientists of ZSI to revise the 'State of the Art Report on Animal Resources of India: Protozoa to Mammals' as more than a decade has passed ever since we revised the document way back in 1998. And it's time to take up this task so that the completed document is released during ZSI's Centenary Celebrations sometime in 2016. I request readers from within and outside ZSI to contact your scientist friends in ZSI towards improving the State of the Art Report with your valuable suggestions. Though belated, I wish all the readers a very Happy New Year and hope that ZSI will grow further and contribute to the science of animal taxonomy of the country.

Dr. K. Venkataraman
Director, Zoological Survey of India, Kolkata

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HEADQUARTERS, KOLKATA

Extensive field surveys have been undertaken in the States of Maharashtra, Chhattisgarh, West Bengal and Andaman & Nicobar Islands. In addition to that, local surveys have been undertaken in Diamond Harbour and its surrounding areas (Namkhana, Kakdwip, Nishchintapur and Poila Number Jetty) and Indian Botanical Garden, West Bengal.

During the month, scientists of HQ office have identified, 11 species of Protozoa (rhizopods from the mosses and water samples), 2 genus of soil and plant-parasitic Nematodes, 3 species of Platyhelminthes, 5 species of Trematodes, 5 species of Crustacea, 10 species of Molluscs, 44 species of Hemiptera, 10 species of Coleoptera, 11 species of Lepidoptera from Maharashtra, 4 species of Orthoptera, from the States of Maharashtra, Gujarat, Jharkhand, Rajasthan, Sikkim, Tamil Nadu, Chhattisgarh, Uttar Pradesh, West Bengal and Andaman and Nicobar Islands.

Identification and advisory services have been rendered on 29 lots of specimens received from different institutions and organizations. In addition to that, identification and advisory services have also been rendered on the materials received from Dr. S.K. Sarkar, Department of Biology, Presidency College, Kolkata on the species *Tribolium castaneum* (Herbst)-Family Tenebrionidae and specimen belonging to the family Curculionidae.

Mrs. Payal Dutta Roy and Mis Swagata Mondal of Zoology Department, Calcutta University, Kolkata visited the Nematelminthes Section for identification. Mr. Imran Alam, K.Zool. Asst. of Bird Section along with Mr. Kamalakannan, J. Zool. Asst. of Mammal Section have been deputed by Director ZSI to take photographs of 250 live birds confiscated and kept in aviaries at the

Zoological Garden, Alipore, Kolkata on 28 January, 2014. Confiscated coral fragments received from Wildlife Crime Control Bureau, Eastern Region, MoEF, Kolkata have been identified by the scientist of General Non-Chordata Section, ZSI HQ.

One ladies handbag sent by Shri. Palash Bhoyar, Assistant Commissioner of Customs, Airport Parcel Sorting Office, Vile Parle (E), Mumbai made up of the skin of Python has been identified by a scientist of Reptilia Section, ZSI HQ and a reply sent accordingly.

A day-long Republic Day functions have been held at ZSI, HQ on 26 January, 2014 and all the scientists, staffs and research scholars actively participated wherein the Director, ZSI hosted the national flag and addressed the audience. On that day, the Directors, ZSI has felicitated the employees of ZSI those who have completed 30 years of service in ZSI by offering them mementos.

Training and Extension Division, ZSI, HQ office has organized a training programme on "GIS in faunal studies, databasing and digitization of faunal collections" from 15-16 January, 2014 at Annandale Hall, ZSI, Kolkata. In total, 14 participants have participated from ZSI Headquarters and Regional Centers. Dr. Arpita Pankaj, Sr. Geologist, from the Geological Survey of India, Kolkata and Dr. K..A Subramanian, Scientist-C, ZSI, Kolkata provided hands-on training to the participants on GIS and gave lectures as resource persons.

Dr. R. N. Kercharaddi, Asst. Professor of Agricultural Entomology, College of Forestry, Ponnampet-571216, Karnataka visited ZSI HQ along with 49 students and Dr. D. P. Uniyal, Wildlife Institute of India, Dehradun (Uttarakhand) also visited different Sections/

Divisions of ZSI, Headquarters

Mr. M. Jadegowda, Assistant Professor, College of Forestry, Karnataka, along with 50 students have visited the Bird Section and other Division and Sections of ZSI, Headquarters on 13 January, 2014. Dr. Suranjana Banerjee, Senior Zoological Assistant has attended a Symposium-cum-national Conference on the Biodiversity, 2014 (held in Kolkata 16-18 January, 2014) and was awarded third prize in the poster presentation category.

A team of scientists (Drs. G. Maheswaran, K.A. Subramanian and Gaurav Sharma) under the leadership of Dr. K. Venkataraman, Director, ZSI, has visited the proposed Nuclear Fuel Complex (NFC) site at Rawathbhatta in Chitoorgarh district of Rajasthan from 31 January 2014 to 6 February 2014 as part of the on-going project to submit conservation action plan on the scheduled animals present in the vicinity of the proposed site as requested by the NFC.

Dr. K. Venkataraman, Director, ZSI, has attended the inter-ministerial meeting under the Chairmanship of Secretary, Planning Commission to review progress work on renovation and up gradation of the Indian Museum, Kolkata on 3 January, 2014 at Yojana Bhawan, New Delhi. Dr. K. Venkataraman, also attended a meeting at National Biodiversity Authority (NBA) and also visited MBRC and SRC, ZSI, Chennai between 8 and 17 January, 2014. He also attended a symposium on 22 and 23 January, 2014 at Coimbatore, Tamil Nadu. He also attended a DPC meeting on 28 January, 2014 at MoEF, New Delhi.

Dr. Kailash Chandra, Scientist-F and Additional Director has attended the inaugural session of 'Third Training Programme for State Government Officials on

Integrated Coastal Zone Management' being organised by the Marine Aquarium and Regional Centre, on 3 January, 2014 at Digha and delivered an inaugural address. Dr. Chandra, has also attended the 'National Conference on Biodiversity: Issues, concern and future strategies' held at Kolkata from 16-18 January, 2014 being organised by the West Bengal Biodiversity Board and also chaired a Technical Session on Bio-resources, Ethno-biodiversity and Livelihood Generations, Climate Change and Biodiversity on 18 January, 2014.

Dr. M.K. Dev Roy, Scientist-B has Attended the inaugural session of National Conference on Biodiversity Organized by West Bengal Biodiversity Board at Science city, Kolkata on 16 January, 2014. Dr. B. Tripathy, Scientist-C has visited WRC, ZSI, Pune for identification of Mollusca (Cephalopoda) collection in NZC on 23 January, 2014.

Dr. P. Jasmine, Scientist-C, has attended a one-day seminar on Prevention and Redress of Sexual harassment at work place on 18 January, 2014, at Telegraph Room Kolkata being organized by the Calcutta Management Association. Dr. V. D. Hegde, Scientist C has attended a national seminar from 16-18 January, 2014 being organized by the West Bengal Biodiversity Board, Kolkata. He also has presented a paper on "Record of Fungus-adapted darkling beetle *Cryphaeus punctipennis* (Gravely, 1915) (Coleoptera: Tenebrionidae: Toxicini) from Himachal Pradesh" in the National Conference on Zoology for Future Education and Research held on 23 and 24 January, 2014 at Queen Mary's College, Chennai.

Publications

- Chakrabarti, S., and Ghosh, A. (2013) Description and review of six species of trematode genus *Philophthalmus* Looss,

1899 from Uttar Pradesh, India. *Ind. J. Helm.* (N.S.) 32:13-26.

- Gupta, S.K. and Chandra, K. (2013) On a collection of Orthoptera (Insecta) from Barnawapara Wildlife Sanctuary, Raipur, Chhattisgarh, India. *Uttar Pradesh J. Zool.* 33(3), 221-248.
- Chandra, K. Kushwaha, S. Biswas, B. and Mukherjee, P. (2014) *Nabis tibialis* Distant, (Hemiptera : Nabidae), A first record from India. *Mun. Ent. Zool.* 9(1): 178-181.
- Chandra, K. Biswas, B. and Kushwaha, S. (2014) Superfamily Pentatomoidea (Hemiptera : Heteroptera) of Madhya Pradesh, India. *Mun. Ent. Zool.* 9(1): 198-205.



Director, ZSI hoisting national flag on Republic Day



Director, ZSI with staff and family members of ZSI on republic day

- Chandra, K., Kushwaha, S. and Tyagi, K. (2014) First record of four colour morphs of the Southern Green Stink Bug, *Nezara viridula* (L.) (Heteroptera: Pentatomidae), from Madhya Pradesh, India. *Mun. Ent. Zool.* 9(1): 254-257.
- Chandra, K. and Kushwaha, S. (2014) New records of Hemiptera (Insecta) from Tawang District, Arunachal Pradesh India. *Mun. Ent. Zool.* 9(1): 525-529.
- Chandra, K. and Kushwaha, S. (2014) Ground Bugs (Hemiptera: Lygaeidae) of Madhya Pradesh, with their distribution in India. *Mun. Ent. Zool.* 9(1): 535-539.
- Jasmine, P., Tripathy B., Ghosh, A.K., Dey, J., Hansda, S., and Venkataraman K. (2013) A preliminary investigation into the community structure and composition of intertidal fauna along the east coast of India Abstract published in *National Conference on Zoology for future Education and Research*, at Queen Mary's College, Chennai from 23 & 24 January, 2014. Pp.18.
- Jasmine, P., and Venkataraman, K. (2013) Seasonal diversity of Planktonic Ostracods in the Mixed layer Depth of Arabian Sea Abstract published in *National Conference on Zoology for future Education and Research* at Queen Mary's College, Chennai from 23 & 24 January, 2014. Pp.19.



Director, ZSI felicitating staff who has completed more than 30 years of service in the department



During Netaji Subash Chandra Bose birthday celebrations observed at ZSI Headquarters



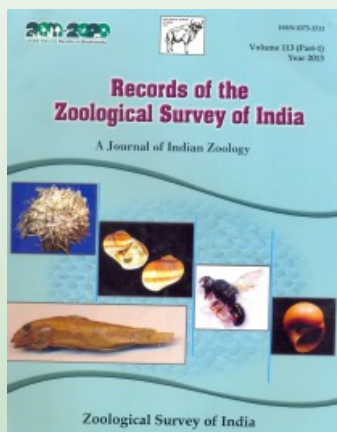
Mr. Radheshyam Mridha, Assistant Zoologist attended National Conference on Soil Biota-2013 as an official delegate at Coimbatore, got first prize and memento. He has also released a book as a Co-Chairperson in during above said National Conference.



During GIS training from 15th to 16th January at Annandale Hall, ZSI Hqs., Kolkata.



During Inauguration of National Conference at QMC, Chennai.



ZSI Publications

ANDAMAN & NICOBAR REGIONAL CENTRE, PORT BLAIR

Faunal surveys have been conducted in the marine ecosystems of Havelock Island, North Bay, and Rutland Island, Redskin Island and Twin Island in Mahatma Gandhi Marine National Park during 4 to 5 and 15 to 17 January, 2014; and in terrestrial ecosystems of Rangat and Baratang at Middle Andaman during 2 to 10 January, 2014 in addition to 7 days of local surveys in and around Port Blair. A total of 372 species includes, 141 species of scleractinian corals, 6 species of polyclads, 5 species of sea anemones, 15 species of opisthobranchs, 12 species of echinoderms, 56 species of gastropods, 10 species of crabs, 7 species of shrimps, 1 species of octopus, 4 species of ascidians and 47 species of fishes have been identified from marine habitats; while 5 species of insects, 8 species of odonates, 2 species of scorpions, 5 species of amphibians, 7 species of reptiles, 39 species of birds and 2 species of bats have been identified / observed from terrestrial environment.

Among them, 6 species are new to Indian waters which include anomuran crabs *Petrolisthes asiaticus* (Leach, 1820) and *Petrolisthes pubescens* Stimpson, 1858; shrimps *Urocaridella antonbruunii* (Brue, 1967) and *Gnathophyllum americanus* Guerin-Meneville, 1855; Octopus *Abdopus aculeatus* (d' Orbigny, 1834); opisthobranch *Pseudobiceros murinus* Newman & Cannon, 1997; whereas 3 species of shrimps *Rhynchocinetes durbanensis* Gordon, 1936, *Periclimenes brevicarpalis* (Schenkel, 1902) and *Stenopus hispidus* (Oliver, 1811) are new to Andaman and Nicobar Islands. Besides, a total of 242 specimens comprised of 3 species of sea anemones, 4 specimens of polyclads, 12 species of crustaceans, 25 specimens of opisthobranchs, 130 specimens of gastropods and bivalves, 4 specimens of ascidians, 8

specimens of fishes, 2 specimens of dipterans, 2 specimens of hymenopterans, 15 specimens of lepidopterans, 1 specimen of scorpion, 6 specimens of amphibians, 13 specimens of reptiles, 9 specimens of aves and 3 specimens of mammals were registered in National Zoological Collections.

An article entitled 'ZSI's contribution on exploration of coral reefs of Andaman and Nicobar Islands' has been published as Republic Day special issue of the newspaper *Daily Telegram*, Port Blair. An agreement has been signed between ZSI and the Military Engineering Services, Ministry of Defense, Government of India for conducting Rapid Environmental Impact Studies for the Construction of Desalination Plant at Indian Coast Guard Complex, Diglipur, North Andaman. A short-term project for the preparation of 'People Biodiversity Register on Coastal and Marine Biodiversity' has been sanctioned to the Centre by National Biodiversity Authority, Chennai. A total of 873 students from 8 schools located in South Andaman visited the Regional Museum and acquainted themselves about the faunal wealth of Andaman and Nicobar Islands.

Dr. C. Raghunathan, Scientist-C and Officer-in-Charge has served as a resource person and delivered a lecture on 'Coast and its importance' in the 'Training Programme on Integrated Coastal Zone Management' at ZSI/MARC, Digha on 5 January, 2014; attended the Programme Advisory Committee meeting of ZSI Southern Zone held at ZSI/SRC, Chennai on 9 January, 2014 and presented the annual progress report of the Centre; delivered a invited lecture on 'Faunal diversity of Andaman and Nicobar Islands with special reference to Marine Ecosystem' in

the Regional Science Congress Meet at Port Blair jointly organized Indian Science Congress Association and Pondicherry University during 23-24 January, 2014. Dr. C. Sivaperuman, Scientist-C has delivered a talk on 'Wildlife census technique and bird watching' at Divisional Forest Office, Middle Andaman on 6 January, 2014.

Mr. Tamal Mondal, Research Associate attended the training programme 'GIS in faunal studies and data-basing and digitization of faunal collections' at ZSI headquarters, Kolkata from 15-16 January, 2014.

Publications

- Mondal, T., Raghunathan, C. and Venkataraman, K. (2013) New record of six

scleractinians with four Vulnerable and one Near Threatened to Indian waters from Nancowry group of Islands, Andaman and Nicobar Islands. *Research Journal of Science and Technology* 5(4): 426-432.

- Agoramoorthy, G. and C. Sivaperuman, 2014. Tourism, Tribes and Tribulations in the Andaman Islands. *Current Science*, 106(2): 141.
- Kumar J.S.Y., N. Marimuthu, S. Geetha, Ch. Satyanarayana, K. Venkataraman and R.D. Kamboj, (2014) Longitudinal variations of coral reef features in the Marine National Park, Gulf of Kachchh. *Journal of Coastal Conservation*. Springer. DOI [10.1007/s11852-014-0303-6](https://doi.org/10.1007/s11852-014-0303-6).



Ascidian *Clavelina moluccensis* Sluiter 1904



Opisthobranch *Dendrodoris fumata* Ruppell and Leukart
1831



Opisthobranch *Cerberilla annulata* Quoy and Gaimard
1832



Opisthobranch *Gymnodoris striata* Eliot 1900



Opisthobranch *Phyllidia varicosa* Lamarck 1801



Reef fish *Pterois volitans* Linnaeus 1758



School of Reef fish *Caesio xanthonota* Bleeker 1853



Shrimp *Saron negletus* Man 1902

ESTUARINE BIOLOGY REGIONAL CENTRE, GOPALPUR-ON-SEA

During the month, two local surveys have been conducted one each at Rishikulya Estuary and Subhadra River Estuary, on 24 and 29 January, 2014, respectively. A total of 243 specimens have been collected pertaining to different groups of benthic fauna and aquatic insects during these surveys. A total of 4 species under 2 genera and 2 families have been identified from the 13 examples of mollusck from the collections of Himachal Pradesh. A total of 2 crab species have been identified pertaining to 2 genera and 2 Families from collections of Narayanpur and Haripur station, Subadhra estuary survey. Seven specimens of aquatic hemiptera have

been examined and identified as belonging to 1 species, 1 genus and 1 family collected from Bharuch, Gujurat during 4th Narmada and Tapi Estuary surveys. A total of 10 aquatic insect species under 9 genera and 5 families have been found from 46 examples collected from Rushikulya and Subadhra estuary survey. A total of 10 Species of mosquitoes collected from Gopalpur coastal villages belongs to 4 species under 3 genera and 1 family have been identified. Ten museum specimens have been digitized. About 40 visitors visited National Zoological Collections at the Centre during the month.



Survey team at Haripur, Subhadra Estuary



Survey site Narayanpur, Subhadra Estuary



Collection of benthos fauna with different gears



Tetragnatha Sp.



Sternolopus Sp.



Limnogonus (Limnogonus) fossarum fossarum

WESTERN GHAT REGIONAL CENTRE, KOZHIKODE (CALICUT)

One extensive field survey has been undertaken to the southern Western Ghats ecosystems of Kollam and Pathanamthitta districts, Kerala during the month and representative faunal samples collected. Seven new species of Pteromalidae (Hymenoptera), viz., *Dipara nigrisucta* Sureshan; *Dipara debanensis* Sureshan; *Dipara venkati* Sureshan; *Dipara nigra* Sureshan; *Dipara hayati* Sureshan; *Dipara thirumalai* Sureshan and *Gastracanthus indica* Sureshan & Dhanya have been published from the collections made from Namdapha National Park, Arunachal Pradesh, Dehradun (received on loan) and Chittur Kerala.

Other identifications include 5 species of Mantodea (Insecta), 4 species of Diapriidae (Hymenoptera), 5 species of Odonata, 2 species of Dermaptera and 4 species of Lepidoptera. 7 species of Polychaeta including 3 Holotypes, 3 Paratypes and 1 Neotype deposited to the NZC, WGRC, Calicut by Dr. M. Magesh, Dept. of Aquatic Biology, University of Kerala, Thiruvananthapuram. During the month, 8 papers have been published and 5 identification and advisory services rendered to various researchers and institutions.

Dr. P.M. Sureshan, Scientist-C and Officer-in-Charge has attended the PAC south zone of ZSI, at SRC, ZSI Chennai on 9 January, 2013 and presented the station's progress of research work. Dr. Md. Jafer Palot, Asstt. Zoologist, has participated in the UGC sponsored National Seminar on "Insect diversity of Western Ghats- an approach towards modern conservation strategies" and presented a talk on "Butterfly diversity of Western Ghats" on 7 January, 2014 at the Department of Zoology, Sir Syed College,

Taliparamaba, Kannur district.

Dr. P.M. Sureshan, Scientist-C, has delivered a talk on the topic "Indian Biodiversity and environmental problems in India" to the students of Wadi Rahma English School, Kodyathur, Calicut on 30 January, 2014. Dr. Md. Jafer Palot, Asstt. Zoologist, has delivered an invited talk on 'Faunal diversity of Western Ghats' at the seminar on 'Shaydri- Origin, Biogeography and Biodiversity' on 23 January, 2013 being organized by the Department of Botany, Farook College, Feroke, Kozhikode. He also delivered another talk on 'Importance of Kottooli Wetlands' to the eco-club students of National Green Crops of the Kozhikode district on 29 January, 2014 at Sarovaram Biopark, Calicut.

Dr. P. M. Sureshan, Scientist-C, has supervised the research project of two research scholars of the Centre and Dr. K. Rajmohana, Scientist-C, has supervised the research projects of four research scholars of the Centre for their doctoral degrees. During the month, 1055 visitors paid their visits to the museum.

Publications

- Sureshan, P.M. (2013) A taxonomic revision of Oriental *Dipara* walker (Hymenoptera: Chalcidoidea: Pteromalidae) with descriptions of six new species from India. *Rec. Zool. Surv. India*. 113(1): 75-93.
- Sureshan, P.M. & Dhanya, B. (2013) A new species of *Gastracanthus* Westwood from Namdapha National park, Arunachal Pradesh, India. (Hymenoptera: Chalcidoidea: Pteromalidae) *Rec. Zool. Surv. India*. 113(1): 31-34.
- Girish Kumar, P., Narendran, T.C., Rajmohana, K., and Sureshan, P.M. (2013) Additional notes on the genus *Ancylotropus* Cameron (Hymenoptera: Eucharitidae)

from Indian subcontinent. *Rec. Zool. Surv. India*. 113(1): 67-74.

- Rajmohana, K., and Nisha, M.S. (2013) *Telenomus oryzae* (Hymenoptera: Platygasteridae), a new egg parasitoid of the rice black bug, *Scotinophara* (Heteroptera: Pentatomidae) from India. *HALTERES* 4:79-86.
- Mukundan, S., Rajmohana, K., and Bijoy, C. (2013) A biosystematic account on Baeini wasps (Hymenoptera: Platygasteridae), the little known natural enemy complex of Spiders in India, abstract published in Proceedings 26th Kerala State Science Congress, Kalpetta, Wayanad, Kerala., pg 212.



Dipara venkati Sureshan, 2013 (Hymenoptera : Pteromalidae)



Dipara debanensis Sureshan, 2013 (Hymenoptera : Pteromalidae)

- Palot, M.J. (2013) *Uragngal: Kuzhimandlaikal* (Reptiles: Pit Vipers) *Koodu-* An environmental Magazine in Malayalam. 1(9): 40-41.
- Palot, M.J. (2013) Butterfly diversity of Western Ghats. In: Abstract Book on the National Seminar on Insect diversity of Western Ghats- an approach towards modern conservation strategies on 7th January 2014 at the Department of Zoology, Sir Syed College, Taliparamaba, Kannur district. Page Nos: 8-9.
- Palot, M.J. (2013) Faunal wealth, diverse habitats. *Pathemari*. A Newsletter of Indian National Trust for Art and Cultural Heritage (INTACH). January-June 2013: 6-8.



Dipara thirumalai Sureshan, 2013 (Hymenoptera : Pteromalidae)



Banded kukri snake – *Oligodon arnensis*

Clear sailer – *Neptis clinia*

Giant squirrel at Achankovil forests, Kerala

*Dicriscelio malabaricus* (Scelionidae : Hymenoptera)

Republic day Celebrations, 2014

SUNDERBANS REGIONAL CENTRE, CANNING

One faunistic survey has been undertaken by Dr.D. Suresh Chand, Scientist-C of this Centre, in and around Sunderbans. A total of 746 faunal examples have been collected belonging to different groups, as follows: Fishes 306 examples, gastropods 8 examples, prawns 112 examples, crabs 8 examples, orthoptera 54 examples, coleoptera 93 examples, Lepidoptera 105 examples, odonates 21

examples, zygoptera 11 examples, diptera 5 examples, hemiptera 9 examples and hymenoptera 14 examples.

Twenty two examples of insects have been identified and registered by the scientists of this Centre, which include 14 exs. of orthoptera, 06 exs. of odonata and 02 exs. of lepidoptera.

*Lampides boeticus*

Collection at Fraserganj

NORTHERN REGIONAL CENTRE, DEHRADUN

One general faunistic survey has been undertaken to Sultanpur Bird Sanctuary and National Park, Haryana and representative faunas collected, besides observing 38 species of birds. Faunal identification during the month includes 2 species of reptiles, 5 species of acridoidea, 3 species of lepidoptera and 9 species of soil nematodes from Punjab; 2 species of reptiles, 5 species of lepidoptera and 8 species of soil nematodes from Sultanpur BS & NP; 8 species of soil nematodes from Govind WLS (Uttarakhand); one species of Encyrtidae and 33 species soil nematodes from Dehradun.

DNA has been extracted by Phenol-Chloroform method and quantified by Qubit 2.0 Fluorometer from 4 samples of 2 species of Nymphalidae butterflies, *Euthalia aconthea* (Hewitson) and *Hypolimnas bolina* (Linnaeus) and from 10 samples of skin, bone and whisker samples of *Felis chaus* Schreber, *Caracal caracal*, Schreber, *Prionairulus bengalensis* (Kerr) and 3 species of Sciuridae. 700bp Amplicon of COI gene using Universal primers obtained from 4 samples of three species of Lycaenidae and Nymphalidae

butterflies and 12s rRNA gene of two species of Sciuridae and squirrel specific primer amplification of 1400 bp was obtained for *Funumbulus pennantii* (Wroughton).

Medulla slides of PGH of *Felis silvestris* Schreber, *Caracal caracal* Schreber and *Prionairulus bengalensis* (Kerr) prepared from dorsal, ventral, tail and head region and 495 permanent slides of nematodes collected from Punjab, Sultanpur NP, Dehradun and Govind WLS surveys, have also been prepared for morphological studies.

During the month we have registered 4 species of reptilia, 3 species of acridoidea, 5 species of lepidoptera, one species of encyrtidae and 53 species of soil nematodes. 10 Database entries of nematodes and 10 lepidoptera entries have been made in the invertebrate datasheet. Digitization of amphibia with 30 entries and 60 images have been made and their metadata entered.

Dr. Vinita Sharma, Scientist-C has attended a project review meeting of UCOST, Dehradun on 23 January, 2014. Sixteen local students have visited the museum and library of NRC.

Publications

- Bhupathy, S, Ramesh, C., and Bahuguna, A. (2014) Feeding habitats of Indian Rock Pythons in Keoladeo National Park, Bharatpur, India. *Herpetological Journal*, British Herpetological Society 24: 59-64.
- Tak, N. & Kazmi, S. I. (2013) On some ants (Insecta: Hymenoptera: Formicidae) From Nagaland, India. *Rec. zool. Surv. India*: 113(1): 169-182.

Fauna observed during survey tour to Sultanpur NP and Bird Sanctuary, Haryana:



Sarus crane, *Grus antigone*



Students of RIMC (Rashtriya Indian Military College) visited NRC Museum

MARINE AQUARIUM & REGIONAL CENTRE, DIGHA

Third training programme sponsored by the World Bank under the Integrated Coastal Zone Management Project for the State Government officials has been conducted by our Centre from 3-9 January, 2014 at Digha with an objective to impart a first-hand knowledge to the managers on various issues related to the coastal and marine biotic and abiotic resources available in the coastal areas of West Bengal in general, and Digha coast, in particular.

The training programme has been inaugurated by Dr. Ramchandra Bhatta, Scientist-G, National Centre for Sustainable Coastal Zone Management, Tamil Nadu on 3 January, 2014 as a Chief Guest. The inaugural session has been chaired by Dr. Kailash Chandra, Addl. Director. Altogether, 22 state

government officials deputed by the eleven different departments have attended the training programme. Eighteen resource persons have delivered lectures on different aspects of coastal biodiversity and their conservation for the sustainable livelihood, food security and bio happiness. The valedictory session has been presided over by Dr. A. K. Ghosh, Former Director ZSI and chaired by Shri. Soumen Pal, Chief Executive Officer, Digha Sankarpur Development Authority.

During the month, a total of 121 specimens have been identified, which includes 67 (of 17 species) fish specimens and 54 (of 22 species) molluscs. From the identified specimens the flowing fish species *Minous trachycephalus* (Bleeker, 1855) has been reported from the first

time from the Indian coast. *Cocotropus roseus* (Day), *Gobiopsis canalis* Lachner & McKinney, 1978, *Gobiopsis macrostoma* Steindachner, 1861, *Opistognathus macrolepis* Peters, 1866, *Yongeichthys nebulosus* (Forsskal, 1775) have also been reported for the first time from the West Bengal coast. One mollusc *Fulvia niankaea* ter Poorten, 2012 is also a first report from the Indian coast.

Publications

- Mohapatra, A., Tudu, P., Ray, D., Yennawar, P. (2013) First report on the occurrence of four fishes of family: Nemipteridae from Digha on the east coast of India. *Records of Zool. Surv. India* 113 (1): 145-149.
- P. Yennawar, P. Tudu, D. Ray, Mohapatra, A. (2013) New records of two reef fishes

Gymnothorax reticularis, Bloch 1795, (Family: Muraenidae) and *Scarus ghobban*, Forsskal, 1775 (Family: Scaridae) from West Bengal coast, India. *Records of Zool. Surv. India*, 113 (1): 129-135.



Lighting of Lamp during the 3rd Govt. Officials Training on ICZM



Inaugural Address by Dr. Ramchandra Bhatta, Scientist- G, National Centre for Sustainable Coastal Zone Management, Tamil Nadu



Inaugural Address by Dr. K. Chandra, Adl. Dir. ZSI during the 3rd Govt. Officials Training on ICZM



Validictory Lecture by Dr. A.K Ghosh, Former Director ZSI



Release of Calender during the 3rd Govt. Officials Training on ICZM



Release of leaflet during the 3rd Govt. Officials Training on ICZM



Certificate Distribution during the training



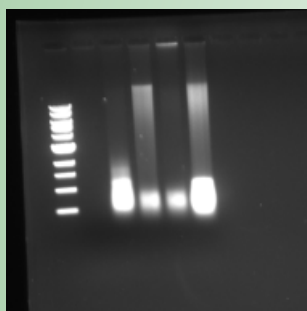
Trainees during the field tour

*Cocotropus roseus**Gobiopsis canalis**Gobiopsis macrostoma**Minous trachycephalus**Opistognathus macrolepis**Yongeichthys nebulosus**Fulvia niankaea*

FRESHWATER BIOLOGY REGIONAL CENTRE, HYDERABAD

Scientists of the Centre have conducted one survey of Major wetlands in Andhra Pradesh from 22-28 January, 2014 and collected 54 lots of zooplanktons, macro-invertebrates and aquatic insects. Also examined 28 examples of freshwater mollusks and identified as *Lymnaea biacuminata*, *Indoplanorbis exustus*, *Gyraulus labiatus*, *Melanoides creba*, *Bellamya dissimilis*, *Bellamya bengalensis f. annandalei*, *Bellamya bengalensis f. colairensis*, *Bellamya bengalensis r. doliaris*, *Lamellidens consobrinus*, *Lamellidens*

corrians; 30 examples of aquatic insects as *Haliplus pulchellus*, *Dactylosternum abdominal*, *Berosus indicus*, *Helochaeres anchoralis*, *Hydrophilus olivaceous*, *Regimbertia attenuate*, *Gyrinus convexusculus*, *Dineutus indicus*, *Hydaticus vittatus*; 77 examples of Ostracods as *Cypris subglobosa*, *Standesia elongate*, *Chrissia biswasi*, *Chrissia spinosa*, *Stenocypris derupta*, *Stenocypris simulans*, *Heterocypris sp.*, five species of cladocera viz. *Diaphanosoma sarsi*, *Ceriodaphnia cornuta*, *Alona davidi punctata*,



Polymerase chain reaction of *Laccotrephus* and *Cybister tripunctatus*

LCO1490	5' GGTCAACAAATCATAAAGATATTGG 3'
HCO2198	5' TAAACTTCAGGGTGACCAAAAATCA 3'
FF2d1	5' TTCTCCACCAACCACAARGAYATYGG 3'
FR1d1	5'CACCTCAGGGTGTCCGAARAAYCARAA 3'

Chydorus sphaericus, *Chydorus barroisi* and three species of Rotifers viz. *Brachionus forficula*, *Brachionus falcatus* and *Keratella tropica*.

As part of the molecular taxonomy studies, the DNA Barcode laboratory of the Centre has isolated the DNA from two species of insects *Laccotrephus griseus* and *Cybister tripunctatus*.

As part of the digitisation of the freshwater fauna, 49 specimens have been digitized pertaining to 10 species of Molluscs viz. *Lamellidens caudobrinus*, *Lamellidens corrianus*, *Bellamya bengalensis rachedoliaris*, *Bellamya bengalensis form colairensis*, *Bellamya bengalensis form Annandale*, *Bellamya dissimilis*, *Melanoides creba*, *Gyraulus labiatus*, *Indoplanorbis exustus*, *Lymnea biacuminata* and 13 species of fishes viz. *Puntius chola*, *Notopterus notopterus*, *Crossocheilus latius*, *Heteropneustes fossilis*, *Puntius sophore*, *Amblypharyngodon mola*, *Glossogobius giuris*, *Chela bacaila*, *Channa punctatus*, *Channa striatus* *Mystus vittatus*, *Etrophus suratensis* and *Puntius ticto*.

Dr. D.V. Rao, Scientist C and Officer-in-Charge and Dr. Deepa Jaiswal, Scientist-C

have attended the PAC South Zone meeting at SRC, ZSI, Chennai on 9 January, 2014.

Smt. Rehnuma Sulthana, Zool. Asst. attended training on 'GIS in Faunal studies & databasing and digitization of faunal collections' at HQ, ZSI, Kolkata during 15-16 January, 2014.

Publications

- P. Yennawar, P. Tudu, D. Ray, Mohapatra, A. (2013) New records of two reef fishes *Gymnothorax reticularis* Bloch, 1795 (Family: Muraenidae) and *Scarus ghobban* Forsskal, 1775 (Family: Scaridae) from West Bengal coast, India. *Rec. Zool. Surv. India*: 113(1): 129-135.
- Mohapatra, A., Tudu, P., Ray, D., Yennawar, P. (2013) First report on the occurrence of four fishes of family: Nemipteridae from Digha on the east coast of India. *Rec. Zool. Surv. India*: 113(1): 145-149.



Sampling at Nagarjuna Sagar Dam



Hydra sp. Gobind Sagar, HP



Melanoides creba



Lamellidens caudobrinus



Gyraulus labiatus

ARUNACHAL PRADESH REGIONAL CENTRE, ITANAGAR

During the month, 105 examples of recently collected fishes have been examined and identified as 12 species belonging to 11 genera and 6 families. Dr. Bikramjit Sinha, Scientist-C & Officer-in-Charge has participated in the 1st meeting of the 21st State Board for Wildlife, Government of Arunachal Pradesh on 28 January, 2014 in the Office of the PCCF, Itanagar to review the management plan of new community reserves. On 29 January, 2014



Creteuchiloglanis kamengensis



Glyptothorax telchitta



Parachiloganis hodgarti

also Dr. Sinha has attended the meeting of the Arunachal Pradesh Forest Research Committee for technical evaluation of research proposals for granting of research permission under the provisions of Wildlife (P) Act, 1972 at the office of the PCCF, Itanagar.



Chaca chaca



Pseudecheneis sulcata



Somileptes gongota

CENTRAL ZONE REGIONAL CENTRE, JABALPUR

During the month, one field survey has been conducted from Madhav National Park, Shivpuri, Madhya Pradesh. Scientists of this regional Centre have identified and registered

22 species of moths (Lepidoptera), 4 species of Coleoptera (Scarabaeidae), 16 species of Hemiptera and 2 species of small mammals from Madhya Pradesh. Identification and

advisory service rendered to Dr. B.M. Parasharya, Research Scientist (Ornithology), AINP on Agricultural Ornithology, Anand Agriculture University, Anand (Gujarat) for identification of larvae and adult specimens of Odonata and have been identified into two species.

The identification report of the same has been sent to the respective university. Research guidance was also provided to Miss. Ridhi R. Chandarna, a M.Sc student of Ecology and Environmental Sciences, Pondicherry University, Pondicherry for analysis of pellet of Forest Owlet collected from Khandwa district, Madhya Pradesh. Twenty-Five students of Post-graduate and graduate from Department of Zoology & Biotechnology, Home Science College, Jabalpur visited our museum on 17 January, 2014. Dr. S. Sambath,

Scientist-C and Officer-in-Charge has attended a national conference on Zoology for future Education and Research organized by the Department of Zoology, Queen Marys' College, Chennai, Tamil Nadu in collaboration with Zoological Survey of India on 23 and 24 January, 2014.

Publications

- Talmale, S. S. (2013) Taxonomic studies on jungle palm squirrel *Funambulus tristriatus* (waterhouse) from northern Western Ghats, *Rec. zool. Surv. India* : 113 (Part-1): 61-66 (Published by Zoological Survey of India, Kolkata).
- Chandra, K., Kushwaha, S., Biswas, B., Mukherjee, P., and Bal, A., (2013) Redescription of *Bardesanes signatus* distant (Hemiptera: Reduviidae) first record from India, *Rec. zool. Surv. India* : 113(1): 141-144.

Birds of Madhav National Park, Shivpuri, Madhya Pradesh identified from recent field survey



Asian Openbill Stork *Anastomus oscitans* (Boddaert)



Oriental White Ibis *Threskiornis melanocephalus* (Latham)



Rosy Starling *Sturnus roseus* (Linnaeus)



Yellow-eyed Babbler *Chrysomma sinense* (Gmelin)

DESERT REGIONAL CENTRE, JODHPUR

During the month, identified and registered 12 species of fish from the jurisdiction area and also digitized 20 specimens from NZC for Research framework Document (RFD). Dr. Sanjeev Kumar, Scientist-C and Officer-in-charge has conducted a survey under the research programme on studies on vertebrate faunal diversity of Kachchh Biosphere Reserve (KBR), Gujarat from 12-20 January, 2014. Thirteen locations have been surveyed during the survey of Kachchh Biosphere Reserve (KBR). The survey was mainly carried out in the water inundated core areas of KBR and part of Great Rann of Kachchh along the Indo-Pak border.

Dr. Sanjeev Kumar, Scientist-C and Officer-in-charge has identified and recorded 5 species of amphibians, 16 species of reptiles, 207 species of aves and 17 mammalian species during aforementioned survey. Besides, 6 examples of fishes have also been collected. Dr. H.S. Banyal, Scientist-C has provided scientific information on the fauna displayed in the museum of the Centre to 75 students of

Sri Aurobindo Centre of New Education, Jodhpur on 20 January, 2014.

Publications

- Banyal, H. S., and Kumar, S. (2013) Addition to the information on record of fish faunal diversity of some selected reservoirs of district Sirohi, Rajasthan. *J. Env. Bio-Sci.*, 27(2): 283-285.
- Gaur, S., Kumar, S., and Rathore, N. S. (2013) Important Species of Lizards in the Thar Desert of Rajasthan. In: *Faunal Heritage of Rajasthan, India-General Background and Ecology of Vertebrates*. (Eds.) Sharma, B.K. Kulshreshtha, Seema and Rahmani, Asad R., Springer International Publishing, Switzerland, 1 (8): 287-293.
- Banyal, H. S., and Kumar, S. (2014) Insectivorous Fishes of Rajasthan State. In: *Abstracts of National Conference on Recent Trends in Applied Entomology* (NCRTAE-2014), Publ: Deptt. Zoology & Environmental Sciences, LMCS & T, Jodhpur. pp. 53-54. (Abstracted).

MARINE BIOLOGY REGIONAL CENTRE, CHENNAI

The Centre in collaboration has conducted the national seminar on "Zoology for future Education and Research" being organized by the Department of Zoology, Queen Mary's College, Chennai. Scientists of this Centre identified 10 species of Protozoa, 8 species of Nematodes, 7 species of Arthropoda, 10 species of Mollusca, and 15 species of Pisces out of the materials collected from Palkbay and Gulf of Mannar Biosphere Reserve. Forty-three species have been digitized and their

metadata compiled. Dr. Rajkumar Rajan Scientist-C has delivered a lecture on "Conservation of corals and coral reefs" at the regional seminar on "Biodiversity Conservation" held at Department of Zoology, Govt. Arts College for Men, Nandanam, Chennai.

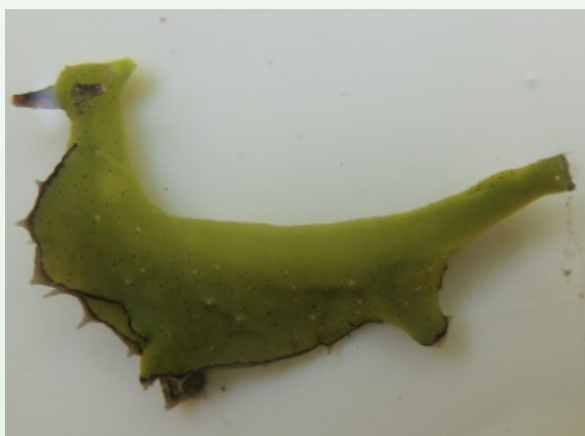
Dr. C. Venkatraman Scientist-C & Officer-in-Charge has presented the progress of completed/on-going research programmes of this Centre before the Programme Advisory

Committee, South Zone held at ZSI, Chennai and attended an Institutional Animal Ethics Committee (IAEC) meeting at Sri. Ramachandra Medical University as External Scientist nominated by Animal Welfare Division, MoEF, New Delhi. He also served as a member of the co-ordinating committee and served as a judge for poster session and chaired a technical session in National seminar on "Zoology for future Education and Research" organized by Department of Zoology, Queen Mary's College, Chennai. Drs. C. Venkatraman and Rajkumar Rajan, have supervised the research projects of SRF's of the centre. One of the research scholars in our Centre has submitted a synopsis on "Spatio-temporal variation of waterbirds in Kachchh, Gujarat, Western India" to the University of Madras. During

the month around 1322 tourists have visited the marine aquarium and museum.

Publications

- Ranju, R., Bindu. L and Jayaprakas, V. (2014) Use of ciliates in pollution monitoring and bioremediation in Vembanad lake, Kerala, India. *Best:IJHAMS*, 2(1): 21-28.
- Shrinivaasu, S., Venkataraman, K., and Venkatraman, C. (2014) New record of genus *Catoptrus* A. Milne Edwards, 1870 from Indian coastal waters. *Global journal of Bio-science and Bio-technology* 3(1): 124-125. <http://www.scienceandnature.org/>
- Venkatraman, C., and Padmanaban, P. (2013) On a collection of shallow-water echinoderms of Gulf of Mannar Biosphere Reserve, southern India. *Rec. Zool. Surv. India*: 113(1): 95-114.



Elysia tomentosa



Emarginella incisura



Ophiactis savignyi



Pomacanthus semicirculatus

GANGETIC PLAINS REGIONAL CENTRE, PATNA

Dr. Gopal Sharma, Scientist-C and Officer-in-Charge has conducted a survey from 27 January, 2014 to 05 February, 2014 for inventorying faunal aquatic diversity of Mollusca and Zooplankton of temporary and permanent water bodies in and around Valmiki Nagar Tiger Reserve, Kusheshwar Asthan, Saraiyamann Lake and Gogabill Pakshi Vihar (IBA Sites).

A total of 356 examples have been collected. Scientists of the Centre have identified 44 examples under 13 species of family Noctuidae: *Cyana catorhoda* Hampson, *Micraloa emittens* (Walker), *Earias chromataria* Walker, *Spilarctia obliqua* Walker, *Cyana peregrina* Walker, *Syntomoides imaon* Cramer, *Fodina stola* Guenee, *Chalciope mygdon* Cramer, *Westermania superb* Hubner, *Leucania yu* Guenee, *Anoba pectinata* (Hampson), *Olepa koslandana* Orhant and *Brunia antica* (Walker). All the identified examples have registered in

the National Zoological Collections kept in the Centre. Scientists also identified 13 species of Mollusca such as *Pisidium nevillianum*, *Lamellidens jenkinsianus*, *Lamellidens mainwaringi*, *Parreysia favidens viridula*, *Radiatula pachysoma*, *Lymnaea acuminata*, *Radix ovalis* and *Indoplanorbis exustus*. Dr Navneet Singh, Scientist-C of the Centre has give guidance to one Mr Abhinav Saxena, Junior Research Fellow of the Department of Zoology & Environmental Sciences, Punjabi University, Patiala for identification of Geometrid collections. He was on visit from 18 December, 2013 to 30 January, 2014.

Publications

- Sharma, G. (2013) Current status of *Susu* (*Platanista gangetica gangetica* Roxburgh, 1801) in River Gandak, A major tributary of the holy river Ganga in Bihar, India. *Rec. Zool. Surv. India*, 113(1): 39-59.

WESTERN REGIONAL CENTRE, PUNE

During this month, an extensive field survey has been undertaken to Dhule and Nandurbar districts of northern Western Ghats of Maharashtra to assess Coccinellids diversity in these districts. In January, a total of 1466 examples comprising of 15 species of coleoptera, 2 species of collembola, 5 species of hymenoptera, 13 species of lepidoptera, 13 species of odonata, 20 species of mollusca, 25 species of pisces and 9 species of amphibia have been identified.

One local tour to Kasarsai dam, Pune has been conducted to collect odonata and hymenoptera specimens. Identification and

advisory services have been rendered to the Principal of Ahmednagar College, Ahmednagar on freshwater mollusca, crustacea (crab); specimens have been identified for Dr. V.S. Zade, Associate Professor, Amarawati and fish specimens have been identified for Mrs. Sarika Mohite, Shivaji University, Kolhapur. One advisory service was also rendered to RFO, Nasik for reptile specimens. Dr. Aparna Kalawate, joined this Centre as Scientist-C on transfer/deputation from Indian Plywood Research Industries Research and Training Institute, Bangalore.

Publications

- Mamatha, B. S., Jagadish, R. L., Kalawate, A. (2013) Investigation on the use of



Euphlyctis cyanophlyctis (Schn)

nanoclay against white rot fungi. *Int. J. Fundamental Applied Sci.* 2(4): 69-70.



Junonia hierta (Fabr.)

NORTH EASTERN REGIONAL CENTRE, SHILLONG

During the month, identifications from the backlog collections have been made on 180 examples of aquatic and semi-aquatic Hemiptera belonging to 12 species such as *Ptilomera* (*Ptilomera*) *laticaudata* (Hardwicke), *Neogerris parvula* (Stal), *Limnogonus* (*Limnogonus*) *nitidus* (Mayr), *Metrocoris nigrofasciatus* Distant, *Rhagovelia* (*Rhagovelia*) *ceylanica* Lundblad, *Montonepa erutus* (Montandon), *Laccotrephes ruber* (Linn.), *Ranatra varipes varipes* Stal, *Heleocoris obliquatus* (Spinoloa), *Aphelocheirus* (*Micraphelocheirus*) *signatus* Zettel, *Diplonychus rusticus* (Fabricius) and *Lethocerus indicus* (Lapeletier & Serville); 220 examples of freshwater molluscs belonging to nine species such as *Brotia* (*Antimelania*) *costula* (Rafinesque), *Paludomus* (*Paludomus*) *conica* (Gray), *Paludomus* (*Paludomus*) *conica* var. *kopiliensis* Nevill, *Paludomus* (*Paludomus*)

blandfordiana Nevill, *Bellamya bengalensis* form *balteata* (Benson), *Melanoides tuberculata* (Mueller), *Thiara lineata* (Gray), *Paludomus* (*Paludomus*) *ornatus* Benson and *Paludomus* (*Paludomus*) *regulata* Benson.

Identification and advisory services have been rendered to Dr. K.K. Jha, Head, Department of Zoology, Jawaharlal Nehru College, Pasighat, Arunachal Pradesh on the identity of four species of fishes – *Oreochthys cosuatis*, *Acanthocobitis botia*, *Pseudolaguvia viriosa* and *Badis badis* collected from Arunachal Pradesh; Shri. F.A. Lamare, Head, Department of Zoology, St. Anthony's College, Shillong on the identity of four species of fishes- *Devario devario*, *Puntius chola*, *Acanthocobitis botia* and *Botia rostrata* collected from Meghalaya; Dr. B. Massar, Assistant Professor, Zoology Department, St. Anthony's College, Shillong on the identity of two species of fishes -

Glyptothorax striatus and *Glyptothorax trilineatus* collected from Meghalaya and Shri. M.K. Das, Senior Research Fellows, Biodiversity Laboratory Institute of Advanced Study in Science and Technology, Guwahati on the identity of six species of aquatic and semi-aquatic Hemiptera – *Aquarius paludum*, *Metrocoris* sp., *Ranatra varipes varipes*, *Diplonychus rusticus*, *Diplonychus molestus* and *Lethocerus indicus*.

10 specimens of bats belonging to three species namely *Pipistrellus m. mimus*, *Pipistrellus circumdatus* and *Faphosous longimanus* have been digitized and their data entered.

Physical verifications of 792 examples of mollusca and 351 jars of amphibians have been done. A scientific paper entitled “Bats in the anthropogenic environment: A case study on diversity, threats and conservation

opportunities” co-authored by Dr. Uttam Saikia, Sr. Zoological Assistant has been presented at the UGC-sponsored National Seminar on Environmental Degradation and its Impact on Germplasm organized by D.K. College, Mirza, Assam on 23 January, 2014.

Shri. A.B. Meetei, Sr. Zool. Assistant attended a workshop on “GIS in faunal studies and digitization of faunal collections” being organized by the Training and Extension Division, ZSI Headquarters, Kolkata on 15 and 16 January, 2014.

Smt. J. Lyngdoh, Scientist-C attended the Advocacy Workshop on Environmental Matters at the main secretariat Shillong, organized by the National Green Tribunal in collaboration with the department of Forests and Environment, Government of Meghalaya on the 23 January, 2014.



Botia rostrata, Gunther, 1868



Devario devario (Hamilton, 1822)



Puntius chola (Hamilton, 1822)

HIGH ALTITUDE REGIONAL CENTRE, SOLAN

The faunistic identification from the Centre includes 03 species of butterflies (out of 10 examples), 01 species of Pisces (out of 02 examples) from Cold Desert of Spiti Valley, district Lahaul & Spiti (HP); 03 species of butterflies (out of 15 examples) and 02 species of Pisces (out of 05 examples) from Kalatop

Khajjiar WLS, district Chamba; 03 species of Orthoptera (out of 4 examples); 01 species of earthworms (out of 07 examples), 01 species of Pisces (out of 02 examples) from Chail WLS, district Solan and 04 species of Pisces (out of 20 examples) from Haryana.

A scientist of the Centre has answered a query

on the identification of butterfly received from Dr. R. Babu, MBRC, Chennai on 03 January, 2013. A scientist also has reviewed a paper for Pakistan Entomologist Journal, Pakistan Entomological Society, Department of Agricultural Entomology, University of Agriculture, Faisalabad, Pakistan. A scientist of the Centre has submitted a book chapter for a book on "Fauna of Indian Himalaya" to DZSI. In the office-cum-museum, 44 LED

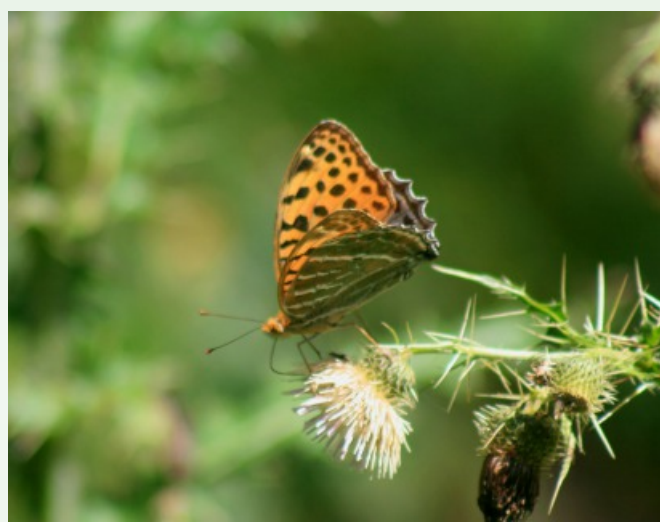
frames depicting fauna of Himachal Pradesh and their ecosystems have been made and displayed for the visitors.

Publication

- Koundal, A., Dhanze, R. and Sharma, I. (2014) Length-weight relationship, condition factor and relative growth patterns of *Channa punctata* (Bloch) from Himachal Pradesh, India, *Zoo's Print* 29(1): 25-29.



Callierbia kalinda



Childrena childerni



LED frames installed at HARC, ZSI, Solan

SOUTHERN REGIONAL CENTRE, CHENNAI

The Centre has hosted the Program Advisory Committee (PAC) of the South Zone on 9 January, 2014. The Officer-in-Charges and Scientists from the Southern Regional Centre, Marine Biology Centre, Fresh water Biology Centre, Western Ghats Research Centre and Andaman & Nicobar Regional Centre have presented their findings on their completed, and ongoing as well as programmes about their respective Centres.

During the month, Dr. R. Babu, Scientist-C has identified 10 species of Odonata from the earlier survey materials collected from Javadu Hills, Tamil Nadu and Amarambalam, Kerala, present in the National Zoological Collections of Southern Regional Centre. He also has conducted three local surveys to Pallikaraini wetland and recorded 35 species of birds including migratory birds belonging to 32 genera under 24 families and 13 species of Odonates belonging to 2 families; Dr. Babu also has collected the representative specimens of Hymenoptera, Odonata, Spiders and Molluscs and rendered identification and advisory services to Dr. Ashish Tiple, Head, Department of Zoology, Vidyabharati, College, Wardha, Maharashtra.

Dr. Jayasree Thilak, Scientist-C has identified 21 specimens of Cladocera belonging to 8 species, 6 genera, 1 order, and 3 families; 28 specimens of Ostracoda belonging to 9 species, 5 genera, 1 order, and 2 families from the zooplankton samples collected from the different localities of Thiruvannamalai district of Tamil Nadu.

Dr. R. Venkitesan, Scientist-C has identified 136 specimens of mollusca belonging to 18 species under 11 genera and 8 families from the existing collection of NZC-SRC, Chennai. Dr. Venkitesan also rendered identification

services to Mr. Radhakrishnan, II M.Sc., of Pachaiyappas College, Chennai on 51 species of Gastropods and 24 species of Bivalves. Dr. R. Aengals, Scientist-C has identified 41 amphibian specimens into 4 species under 3 genera and 3 families collected from southern Eastern Ghats of Tamil Nadu. Dr. S. Prabakaran, Scientist-C has identified 20 examples of Lepidoptera species received from Queen Mary's College for Women, Chennai belonging to 20 species under 12 genera and 5 families.

Dr K. Ilango, Scientist-D and Officer-in-Charge has attended the 10th Anniversary Celebrations of the National Biodiversity Authority, Chennai On 20 January, 2014. He also delivered a plenary lecture on the Faunal Diversity of India and chaired a session at the National Conference on Zoology for Future Education & Research jointly hosted by the Dept. of Zoology, Queen Mary's College, Chennai and the Zoological Survey of India from 23-24 January, 2014.

Dr S. Prabakaran has conducted a Ph.D. Public Viva-Voce Examination as an external examiner being appointed by the University of Madras at the Department of Advanced Zoology and Biotechnology, Loyola College, Chennai on 22 January, 2014. Shri. D. Prabakar, Assistant Zoologist has identified 73 examples of grasshoppers into 10 species under 10 genera, 7 sub-families and 3 families collected during the faunistic surveys to the Eastern Ghats of Tamil Nadu part. Dr. V.M. Sathish Kumar, Assistant Zoologist has identified and processed 2 Reptile and 1 Amphibian specimen for the DNA studies.

Publication

- Ganesh, S.R., Aengals, R., and Ramanujam, E. (2014) Taxonomic reassessment of two

Indian shieldtail snakes in the *Uropeltis*
ceylanicus species group (Reptilia:

Uropeltidae) *Journal of Threatened Taxa* 6(1):
5305-5314.



During PAC meeting at SRC, Chennai

Faunas observed during the survey of the Western Ghats of Tamil Nadu



Libellago lineata (Burmeister)



Trithemis aurora (Burmeister)

ANIMAL OF THE MONTH**Yellow-billed Blue Magpie or Gold-billed Magpie (*Urocissa flavirostris*)**

The **Yellow-billed Blue Magpie** or **Gold-billed Magpie** (*Urocissa flavirostris*) is a passerine bird under crow and jay family, Corvidae. The distribution of the species ranges across the northern parts of the Indian Sub-continent including the lower Himalayas, with a disjunct population in Vietnam. The Yellow-billed Magpie is found throughout from the western Himalayas to the Brahmaputra in the east. The *U. f. cucullata* race is better known and is found from its western boundary of the range to western Nepal, and is recognised as a common species of the hill stations of the



Text by Imran Alam and
Photo by G. Maheswaran, ZSI, Kolkata

Western Himalayas, breeding from 1,500 to 3,000 m. We had recorded this species most commonly in the peripheries of Great Himalayan National Park (GHNP) in Himachal Pradesh mostly in the conifer forests. Often seen in flocks each comprises of a few to many birds flying from one patch of the forest to the other and settling down on the floor rummaging the forest floor by tilting the dry fallen leaves for insects. The food, often consist of small mammals, the eggs and young of other birds, insects, and wild fruits and berries of various kinds.

OUT OF THE BOX**V for efficiency: bird formations explained**

<http://www.thehindu.com/sci-tech/energy-and-environment/v-for-efficiency-bird-formations-explained/article5582070.ece?homepage=true>

25% of sharks and rays at high risk of extinction

<http://timesofindia.indiatimes.com/home/environment/pollution/25-of-sharks-and-rays-at-high-risk-of-extinction/articleshow/29199063.cms>

HP to launch snow leopard research, conservation facility in Spiti

<http://timesofindia.indiatimes.com/home/environment/developmental-issues/HP-to-launch-snow-leopard-research-conservation-facility-in-Spiti/articleshow/29174501.cms>

Mass extinction happened in the blink of an eye: Scientists

<http://timesofindia.indiatimes.com/home/science/Mass-extinction-happened-in-the-blink-of-an-eye-Scientists/articleshow/30221434.cms?>

OBITUARY

Late Shri Mrityunjay Chattopadhyay (1954-2014)

Shri. M. Chattopadhyay was born on 15 April, 1954 and in his very early age of twenty years he joined the ZSI as Laboratory Assistant on 10 June 1974. He got promoted as Gallery Assistant in ZSI Fire Proof Spirit Building where ZSI maintains its permanent galleries inside the Indian Museum. Due to hard work and skill, he raised the ladders of ZSI quickly and held the posts of



Zoological Assistant, Senior Zoological Assistant and at last as Assistant Zoologist in 2013. Survived by his wife and son, Chattopadhyay was on treatment for an ailment in his final days before attaining heavenly abode on 24 January 2014. His sudden death has created a vacuum in our ZSI's FPS building which many of his colleagues feel that difficult to fill that up.

ERRATA (ZSI e-News December, 2013)Under Western Regional Centre, Pune

Photo captions should read as

Photo 1: Dragonfly *Anax guttatus* Burmeister from the northern Western Ghats

Photo 2: Butterfly *Hypolimnys bolina* Linnaeus (Female) from the northern Western Ghats

Photo 3: Freshwater fish *Rohdeia ogilbii* (Sykes) from the northern Western Ghats

Photo 4: Freshwater fish *Schismatorhynchus nukta* (Sykes) from the northern Western Ghats

Under Obituary

Date of birth of Prof. T.C. Narendran should be read as

24 February, 1944