



# ZSI e-NEWS

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November 2013

## *ZSI in the 98<sup>th</sup> years of Service to the Nation (1916 to 2013)*

### From the Director's desk

I hope many of you remember that I wrote to you all a couple of months back about our intention of organising the first National Taxonomic Congress (NTC) under the initiative of our administrative Ministry. Due to various logistic reasons, the NTC could not be materialised as envisaged to be held in the first week of December, 2013. Now, the Ministry has decided to conduct the NTC from 10-12 March, 2014 and hope to have a good response from fellow animal taxonomists working in colleges and universities and elsewhere. As I wrote to you earlier, it is going to create a window of opportunities especially for young budding taxonomists as they will get to interact with some of the renowned taxonomists of the country. The MoEF is organising this event jointly with ZSI and BSI only to find the gaps in science of plant and animal taxonomy in India and to build a concerted long-term capacity building measure in order to take forward the decided agendas each year to the next Congress. By which, the science of taxonomy in India may get a new lease of life and identify amongst various other new and emerging branches of science.

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

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## Headquarters, Kolkata

In November, extensive field surveys have been undertaken in the states of Maharashtra, Chhattisgarh, Rajasthan (Desert Ecosystem of Rajasthan) and West Bengal. In addition to these, local surveys have been undertaken in Indian Botanical Garden, Howrah, West Bengal.

During the month, scientists of HQ office have identified, 14 species of Protozoa, 4 genera of soil and plant parasitic Nematodes, 2 species of Platyhelminthes, 14 species of Crustacea, 4 species of Collembola, 70 species of Hemiptera, 4 species of Odonata, 11 species of Coleoptera, 29 species of Hymenoptera, 2 species of Orthoptera, 11 species of tick and mites, 20 species of Fishes, 14 species of Amphibia and 3 species of Mammals from the states of Maharashtra, Jharkhand, Karnataka, Meghalaya, Mizoram, Rajasthan, Sikkim, Tamil Nadu, Uttarakhand, Odisha, Chhattisgarh, Uttar Pradesh, West Bengal and Andaman and Nicobar Islands.

One study tour to Northern Regional Centre, ZSI, Dehradun and Manipur University Museum of Fishes (MUMF), Imphal was conducted by Dr. L. Kosygin Singh, Scientist-C from 27 October, 2013 to 10 November, 2013 to study the fishes of the genus *Barilius* Hamilton, 1822.

A new species namely *Subancistrocerus venkataramani* Girish Kumar, 2013 (Hymenoptera: Vespidae: Eumeninae) is been described from Parasnath Hills, Giridih district, Jharkhand.

The species *Subancistrocerus camicrus* (Cameron, 1904) is newly recorded from Assam and Manipur and *Subancistrocerus sichelii* (de Saussure, 1856) is newly recorded from Andaman & Nicobar Islands, Arunachal Pradesh, Assam, Bihar, Meghalaya, Odisha, and Tripura.

Dr. Kailash Chandra, Scientist-F and Additional Director has reviewed manuscript for ZSI's e-Journal PROMMALIA on 18 November, 2013.

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 for Prof. R. Swaminathan, Rajasthan College of Agriculture, Maharana Pratap University of Agriculture and Technology, Udaipur; Mr. Olive Biswas, Research Scholar, Department of Zoology, Vidyasagar College, Kolkata; Ph.D. scholars from North Eastern Regional Institute of Science and Technology, Nirjuli, Arunachal Pradesh have visited bird and mammals sections on 22 November, 2013. They have studied and taken photographs of specimens of flying squirrels present in the National Zoological Collection.

Dr. Gaurav Sharma, Scientist-C of Mammal Section has identified the material received from the Divisional Forest Officer, Wildlife Head Quarter, Salt Lake City, Kolkata and identified as raw hairs of Grey Mongoose *Herpestes edwardsii*.

A sealed packet containing Bird feather have been received from WCCB (NR) for identification, for which report was prepared and sent to the respective office on 21 November, 2013. Mr. Imran Alam, Jr. Zoological Assistant of Bird Section has prepared one report on Peafowl species of the world as a reply to RTI query and sent reply to the respective department, through proper channel.

Dr. Vikram Prasad, Founder Member, International Journal of Acarology, Michigan, U.S.A; Indira Publishing House, Michigan, U.S.A, visited Acarology Section, ZSI, Headquarters. Ms. Paramita Basu, Senior Research Fellow attended and presented paper in the 24<sup>th</sup> All India Congress in Zoology organized by Zoological Society of India in collaboration with Kalyani University from 23-25 November, 2013.

Dr. V.V. Gantait and Dr. D. Sen attended to the National symposium on "Nematode: a

friend and foe of agri-horticultural crops" at Dr. Y.S. Parmar University of Horticulture and Forestry, Nauni, Solan, Himachal Pradesh during 21-23 November, 2013. Dr. Gantait has delivered a lead talk on "Expedition to Antarctica: A nematological perspective" to the National symposium on "Nematode: a friend and foe of agri-horticultural crops" at Dr. Y.S. Parmar University of Horticulture and Forestry, Nauni, Solan, Himachal Pradesh on 22 November, 2013.

Programme Monitoring Committee (PMC) meeting has been organised by the Director, ZSI on 6 November, 2013 at HQ office, Kolkata. Dr. (Ms.) R. Dalwani, Advisor, MoEF has Chaired the meeting and Shri. Jerome Minz, Deputy Secretary, MoEF has also participated in the PMC meeting. Both the officials from the MoEF also visited various Divisions and Sections of ZSI.

Shri. Narendra M. Naidu, Associate Professor, Dept of Zoology, Modern College, Pune visited HQ office on 13 November, 2013; Prof. Poyamouli and two colleagues from Salim Ali School of Ecology & Environment, Pondicherry University, Pondicherry, visited ZSI on 19 November, 2013. Prof. R. Swaminathan, Rajasthan College of Agriculture, Maharana Pratap University of Agriculture and Technology, Udaipur, on 14 November, 2013 visited Coleoptera Section of HQ office. A team of 25 persons from FRLHT and Biodiversity Management Committee (BMC) members of the West Bengal visited different Sections of HQ office on 20 November, 2013.

Dr. K. Venkataraman Director, ZSI and Member Secretary of PMC presented the progress of the scientific and administrative achievements of ZSI to the Chairman and members on 6th November 2013. On 4 November, 2013, Dr Venkataraman Chaired the celebration of Ambedkar Birthday in ZSI. Dr. Venkataraman, has attended a meeting with Additional Secretary on 13 November, 2013 in the Ministry of Environment and Forests (MoEF), New Delhi regarding

National Taxonomy Congress. Dr. Venkataraman also has attended the 27<sup>th</sup> Meeting of the Expert Committee on Access and Benefit Sharing held on 21 and 22 November, 2013 at National Biodiversity Authority (NBA), Taramani, Chennai. Dr. Venkataraman, also has attended a meeting with Additional Secretary on Renovation of Zoological Gallery of Indian Museum at Ministry of Environment and Forests (MOEF), New Delhi on 20 November, 2013.

Dr Kailash Chandra, Scientist-F and additional Director has attended the meeting in the chamber of Shri Shashi Sekhar, Additional Secretary, MoEF, New Delhi with regard to the National Taxonomy Congress and other administrative matter on 13 November, 2013. Dr Chandra also has attended the meeting at Indian Museum on 27 November, 2013 regarding the renovation of ZSI galleries for the Bi-centenary celebration of Indian Museum. The meeting was chaired by the Secretary to Hon'ble Governor of West Bengal.

Dr. Gopinathan Maheswaran, Scientist-C & Officer-in-Charge of Bird Section has attended the 16<sup>th</sup> meeting of the Appraisal Committee (Nuclear) to examine nuclear projects- Consideration of the setting up of a Fuel Complex at Rawatbhatta Atomic Power Station and for which ZSI is preparing Conservation Action Plan on the Schedule-I animals. Dr. Gopinathan Maheswaran, Scientist-C & Officer-in-Charge Bird Section, along with Dr. K. Venkataraman, Director, ZSI visited Barrackpore Air Force Station on 15 November, 2013 on their invitation to discuss about the project to be under taken by ZSI on how to minimize bird hazard to aircraft. ZSI team met Wing Commander S. Bose of Barrackpore and he appraised of the problems the airfield face because of the presence of birds in the vicinity.

Dr. K. A. Subramanian, Scientist- C has delivered an invited lecture on "Spatial Distribution of Odonata in Indian Subcontinent" in the "Frontiers in Modern

Biology Symposium", at Indian Institute of Science Education and Research, Kolkata and on "Biodiversity in Space and Time" in a Refresher Course at Life Sciences, Department of Zoology, Calcutta University, Kolkata.

### Publications

- Chitra J. (2013) Diversity, abundance and seasonal fluctuation of Zooplankton from few wetlands in and around Kolkata. *Records Zool. Surv. India. Occ. Paper.* 352: 1-48.
- Emilyamma, K.G and Subramnaian, K.A. (2013) *Odonata: Fauna of Karnataka. State Fauna Series*, 21: 85-86. (Published by the Director, Zool. Survey of India, Kolkata)
- Gaur, S., and Sharma, G. (2013) Herpetofauna of Kumbhalgarh Wildlife Sanctuary. In: *Kumbhalgarh Wildlife Sanctuary, Conservation Area Series*. Published by Director, Zool. Survey of India. 47: 67-72.
- Girish Kumar, P. (2013) A revision of the genus *Subancistrocerus* de Saussure (Hymenoptera: Vespidae: Eumeninae) from Indian subcontinent. In: *Animal Diversity, Natural History and Conservation. Published by Daya Publishing House, New Delhi.* 2: 53-68.
- Girish Kumar, P., Srinivasan, G., and Carpenter, J. M. (2013) A taxonomic study on the genus *Tropidodynerus* Bluthgen (Hymenoptera: Vespidae: Eumeninae) from the Indian subcontinent. *Prommalia* 1: 162-174.
- Jehamalar, E., and Chandra, K. (2013) Two new species of *Metrocoris* Mayr (Hemiptera: Heteroptera: Gerridae) from India. *Zootaxa* 3734(1): 063-071.
- Kulkarni, N., Rizvi, A.N., Kumar, V., Paunikar, S., and Mishra, V.K. (2012) Morphological and molecular characterization of *Steinernema dharanaii* sp. N.: A new entomopathogenic Nematode from India. *Indian J. Trop. Biodiv.* 20(2): 107-116.
- Maheswaran, G. (2013) Bird records from Tawang district, Arunachal Pradesh, India. *J. Bombay Nat. Hist. Soc.* 110(1): 35-49.
- Prabakar, D. and Chandra, K. (2013) *Insecta: Orthoptera in Fauna of Karnataka, State Fauna Series*, 21: 87-96. (Published by the Director, Zool. Survey of India, Kolkata)
- Sharma, G. (2013) A review on the studies on faunal diversity, status, threats and conservation of Thar Desert or Great Indian Desert Ecosystem. *Biological Forum-An International Journal.* 5(2): 81-90.
- Sharma, G. (2013) *Insecta: Odonata of Kumbhalgarh Wildlife Sanctuary*. In: *Kumbhalgarh Wildlife Sanctuary, Conservation Area Series*. Published by Director, Zool. Surv. India. 47: 31-42.
- Sharma, G., and Dhadeech, S.N. (2013) *Insecta: Lepidoptera: Rhopalocera of Kumbhalgarh Wildlife Sanctuary*. In: *Kumbhalgarh Wildlife Sanctuary, Conservation Area Series*. Published by Director, Zool. Survey of India. 47: 43-50.
- Sharma, R.M. and Chandra, K. (2013) *Insecta: Ephemeroptera in Fauna of Karnataka, State Fauna Series*, 21: 79. (Published by the Director, Zool. Survey India, Kolkata)
- Sharma, R.M. and Chandra, K. (2013) *Insecta: Plecoptera in Fauna of Karnataka, State Fauna Series*, 21: 85-86. (Published by the Director, Zool. Survey India, Kolkata)
- Sharma, R.M. and Chandra, K. (2013) *Insecta: Embioptera in Fauna of Karnataka, State Fauna Series*, 21: 125-126. (Published by the Director, Zool. Survey of India, Kolkata)
- Sharma, R.M. and Chandra, K. (2013) *Insecta: Mantodea in Fauna of Karnataka, State Fauna Series*, 21: 127-128. (Published by the Director, Zool. Survey of India, Kolkata)
- Sharma, R.M. and Chandra, K. (2013) *Insecta: Neuroptera in Fauna of Karnataka, State Fauna Series*, 21: 163-165. (Published by the Director, Zool. Survey of India, Kolkata)
- Sharma, R.M. and Chandra, K. (2013) *Insecta: Siphonaptera in Fauna of Karnataka, State Fauna Series*, 21: 195-196. (Published by the Director, Zool. Survey of India,



Kolkata)

- Sharma, R.M. and Chandra, K. (2013) *Insecta: Trichoptera in Fauna of Karnataka, State Fauna Series, 21: 207-209*. (Published by the Director, Zool. Survey India, Kolkata)
- Subramanian, K.A., Dinesh, K.P. and

Radhakrishnan, C. (2013). Atlas of Endemic Amphibians of the Western Ghats. Zoological Survey of India. 246pp.

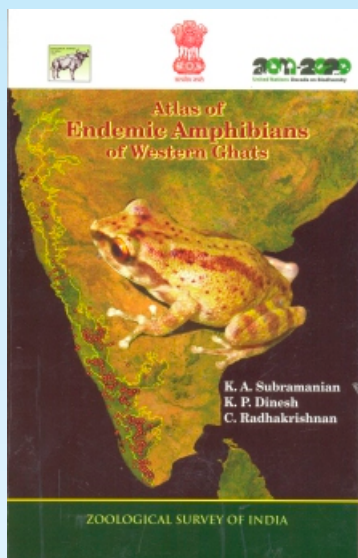
- Tyagi, K., and Kumar, V. (2013) The genus *Rhamphothrips* in India (Thysanoptera: Thripidae) with description of a new species. *Zootaxa* 3745(4): 491-495.



During PMC meeting at ZSI's HQ office, Dr. (Ms.) R. Dalwani (CS-II), Advisor, MoEF and Shri. Jerome Minz, Deputy Secretary of MoEF, New Delhi have participated.



A team of 25 persons from FRLHT and BMC members of the West Bengal visited different Sections/ Divisions of ZSI, Headquarters on 20 November, 2013.



Atlas of  
Endemic  
Amphibians  
of Western  
Ghats.



A new species *Subancistrocerus venkataramani* Girish Kumar.

## Andaman & Nicobar Regional Centre, Port Blair

During the month, coastal and marine ecosystems of north Andaman, terrestrial and wetland ecosystems of south Andaman have been surveyed during 5<sup>th</sup>, 9<sup>th</sup>, 12<sup>th</sup>, 15<sup>th</sup> to 17<sup>th</sup> and 21<sup>st</sup> to 27<sup>th</sup> November, 2013 to study their faunal communities. A total of 326 species includes 3 species of sponges, 93 species of scleractinian corals, 16 species of gorgonians, 3 species of octocorals, 2 species of polyclads, 4 species of sea anemones, 13 species of opisthobranchs, 19 species of echinoderms, 60 species of gastropods, 9 species crabs, 1 species of ascidian and 21 species of fishes have been identified from marine habitat while, 7 species of insects, 22 species of butterflies, 1 species of moth, 4 species of spiders, 2 species of amphibians, 3 species of lizards, 1 species of reptile and 42 species of birds have been identified/observed from terrestrial environment.

Among the identified species, a total of 171 specimens comprised of 1 specimen of sponge, 44 specimens of corals, 4 specimens of sea anemone, 5 specimens of polyclads, 12 specimens of echinoderms, 51 specimens of molluscs, 6 specimens of opisthobranchs, 37 specimens of butterflies, 4 specimens of

diptera, 1 specimen of odonate and 4 specimens of spiders registered in National Zoological Collections. Besides, a crab *Episesarma chengtongense* (Serene and Soh, 1967) has been recorded as new addition to Indian waters.

An EIA study proposal entitled 'Studies on the biotic components of proposed extension of the existing jetty and construction of wet basin for Indian Navy at Haddo, Port Blair' has been submitted to the Military Engineering Services, Ministry of Defence on request. Edible nest of Swiftlet has been identified for Crime Police Station, Port Blair on request.

Dr. C. Raghunathan, Scientist-C & Officer-in-Charge has reviewed manuscripts for the journals *Records of Zoological Survey of India*, *Indian Journal of Geo-Marine Sciences*, and *Journal of Microbiology, Biotechnology and Food Sciences*. Dr. C. Sivaperuman, Scientist-C has reviewed the manuscript for *African Journal of Agricultural Research*.

Mrs. Kamla Devi, Assistant Zoologist and Mr. Tamal Mondal, Senior Research Fellow have attended a seminar on 'Educational dimension of A&N Islands: Present scenario and future



challenges' organized by Department of Education, Andaman and Nicobar Administration and made a presentation on 'ZSI's perspectives on education system' on 11 November, 2013. Mrs. Kamla Devi also attended evaluation committee meeting held at Department of Environment and Forests, Andaman and Nicobar Administration on 26 November, 2013. Mr. P.T. Rajan, Senior Zoological Assistant has served as a judge in 'Science, Arts and Commerce Exhibition' organized by South Andaman Education Zone of Department of Education, A&N Administration on 19 November, 2013.

#### **Publications**

- Mishra, S.S., Kosygin, L., Rajan, P.T., and Gopi, K.C. (2013) Pisces. In: *Endemic Animals of India* (Vertebrates), (Eds. K. Venkataraman, A. Chattopadhyay and K. A. Subramanian), Published by Director,

Zoological Survey of India, p. 7-105 + 6 plates.

- Rajan, P.T., Sreeraj, C.R., and Immanuel, T. (2013) Fishes of Andaman and Nicobar Islands: A checklist. *Journal of Andaman Science Association* 18(1): 47-87.
- Sivaperuman, C. (2013) Diversity and species-abundance distribution of birds in the Ritchie's archipelago, Andaman and Nicobar Islands. *Annals of Forestry* 21(1); 101-112.
- Sivaperuman, C., Shah, S.K. and Venkataraman, K. (2013) Lepidopteran (Moth) pests in Andaman and Nicobar Islands. pp. 203-209. In: *Forest Health Management*. (Eds.) A. Balu, R.S.C. Jayaraj, A. Regupathy, V. Mohan, R.R. Warriar, T.P. Rathunath and N. Krishnakumar. Institute of Forest Generics and Tree Breeding, Coimbatore.



Opisthobranch *Phyllidiella rudmani* Brunckhorst 1993



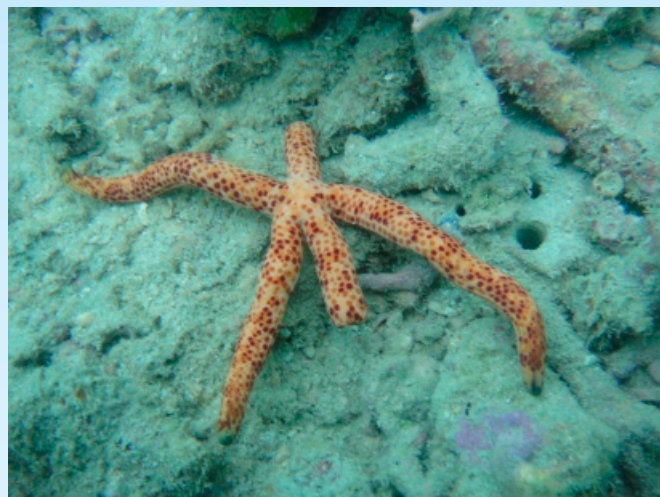
School of *Lutjanus vitta* Quoy Gaimard 1824



Scleractinian coral *Acropora formosa* Dana 1846



Scleractinian coral *Herpolitha weberi* Horst 1921

Sea anemone *Heteractis magnifica* Quoy Gaimard 1833Sea star *Linckia multifora* Lamarck 1816

### Western Ghat Regional Centre, Kozhikode (Calicut)

One intensive survey has been undertaken to the southern Western Ghats ecosystems of Coorg district Karnataka including Brahmagiri WLS, Thalacauvery WLS and Pushpagiri WLS from 1-11 November, 2013 and representative faunal samples collected. Two manuscripts describing two new species of genus *Gryon* Haliday and *Neotrimorus* (Hymenoptera: Platygasteridae) have been finalised and submitted for publication. Another two new species of *Protelenomus* Kieffer, 1906 from Arunachal Pradesh and a new species of *Styloteleia* Kieffer (Hymenoptera: Platygasteridae) and four new species of *Alloxysta* Forster (Hymenoptera: Cynipoidea: Figitidae: Charipinae) have been published.

Other identification includes, 8 species of Pteromalidae (Hymenoptera), 5 species of Platygasteridae (Hymenoptera) including 3 new species, 3 species of Mantodea, 13 species of Odonata, 9 species of Lepidoptera and 5 species of Reptilia. Six identification and advisory services have been rendered to students and other researchers. Dr. P.M. Sureshan, Scientist-C and Officer-in-Charge

has imparted training on the collection, preservation and identification of Preying mantids (Insecta: Mantodea) to Mr. Bertrand Horne, Research scholar, Dept. of Zoology, Layola college, Chennai for two days from 21 November 2013.

Dr. K. Rajmohana, Scientist-C, has delivered an invited lecture on 'Parasitic Hymenoptera as Natural enemies, at a National Seminar on 'Changing Perspectives in Entomology, at Madappally Gov. College, on 22 November, 2013. Dr. Md. Jafer Palot, Asstt. Zoologist, has delivered a talk on 'Environmental Importance of Kadalundi-Vallikunnu Community Reserve' at the nature camp "Haritha theerthadanam" organized by Kerala Forests & Wildlife Department at Kadalundi on 23 November, 2013 and also participated in the one-day state level strategic planning & capacity building workshop on 'Bird Conservation initiatives in Kerala' organized jointly by Kerala Forests & Wildlife Department, Kerala Forest Research Institute and SACON Coimbatore at Government Guest House, Cochin on 25 November, 2013.



Dr. P.M. Sureshan, Scientist-C has supervised the preparation of a synopsis entitled "Studies on the diversity and host-parasitoid association of Pteromalidae (Hymenoptera: Chalcidoidea) of Kerala with special emphasis on the agroecosystems" for presentation before the Research Admission committee of University of Calicut for registration to Ph.D by Miss. Razeena Farsana V.K. under his guidance. Dr. Md. Jafer Palot, Asstt. Zoologist, has participated in a one-day pelagic sea bird survey at Calicut coast on 30 November, 2013 organized by Kerala Forests & Wildlife Department and Fisheries Department, Govt, of Kerala.

During the month, 595 visitors paid their visits to the museum.

#### Publications

- Amina, P., and Rajmohana, K. (2013) First record of the genus *Ceylonitermellus* Emerson (Isoptera-Termitidae-Nasutitermitinae) in southern India, based on a new mainland species from the Kerala Ghats. *Colemania*, Number 39, pp. 1-10.
- Bijoy, C., and Rajmohana, K. (2013) Descriptions of four new species of the Genus *Alloxysta* Forster (Hymenoptera: Cynipoidea: Figitidae: Charipinae) from India. *Biosystematica*. 7(1): 59-66.
- Dinesh, K.P. and Radhakrishnan, C. (2013) Description of tadpole stages of the Malabar Tree Toad *Pedostibes tuberculosus* Gunther 1875 (Anura: Bufonidae). *J.Threatened Taxa*, 5(14): 4910 – 4912.
- Dinesh, K.P., Radhakrishnan, C., Ray, S., Sethy, P.G.S., and Bhatta, G.K. (2013) Amphibia. In: *Fauna of Karnataka, State Fauna Series*, 21: 389 – 434.
- Emiliyamma, K.G., and Subramanian, K.A. (2013) Insecta: Odonata. in *Fauna of Karnataka, State Fauna Series*, 21: 81-84.
- Palot, M.J. (2013) Windblown Pelagic birds recorded during the monsoon of 2013 from Kozhikode coast, Kerala. *Malabar Trogon*. 10(3): 33.
- Palot, M.J., and Radhakrishnan, C. (2013) Lepidoptera: Rhopalocera. In: *Fauna of Karnataka*. State Fauna series. Published by Zoological Survey of India, Kolkata.
- Palot, M. J. (2013) Western Ghats: Cornucopia of Teeming Life. *Mathrubhumi Yatha Magazine* (The complete Travel Magazine). Vol.6. Issue 3. November 2013, pp. 68-71.
- Palot, M.J. (2013) Uragngal: Shanguvarayan (Reptiles: Indian Krait) *Koodu- An environmental Magazine* in Malayalam. Vol.1 (4): 41.
- Palot, M.J. (2013) Herpetofaunal diversity of Kerala- An Overview. In: *Biodiversity conservation challenges and prospects*. (Compilation of selected Research papers presented at the National Seminar on Biodiversity conservation Prospects and Challenges) (Edited by S.M. Ghosh *et al.*). Government College, Kasaragod. Pp; 33-50.
- Rajmohana, K. (2013) Insecta: Hymenoptera: Platygastroidea. *Zool. Surv. India Fauna of Karnataka, State Fauna Series*, 21: 219-224, 2013.
- Rajmohana, K. (2013) On a new species of *Protelenomus* Kieffer, 1906 (Hymenoptera-Platygastriidae-Telenominae) from Arunachal Pradesh, being the first record of the genus from India. *Colemania*, Number 38, pp. 1-7
- Rajmohana, K. (2013) On a new species of *Styloteleia* Kieffer (Hymenoptera: Platygastriidae) from India, along with a key to species of the Oriental Region. *Biosystematica* 7(1): 05-09.
- Sureshan, P.M. (2013) Insecta : Hymenoptera : Chalcidoidea : Pteromalidae,. *Fauna of Karnataka. Zool. Survey of India. State fauna series* 21: 211-218.



Shola forests of Thalacauvery WLS, Coorg dt,  
Karnataka



Abbey falls, Coorg, Karnataka



Pomarine Skua, *Stercorarius pomarinus* at the marine  
waters of Calicut coast



*Stylotelia alpha* (Hymenoptera : Platygasteridae)



Limbless amphibia *Ichthyophis beddomei* from  
Pushpagiri WLS, Coorg



*Ophisops leschenaultia* (Reptilia : Lacertidae)





*Boiga nuchalis* (Reptilia : Colubridae)



*Cyrestis thyodamas* (Lepidoptera Nymphalidae)

### Estuarine Biology Regional Centre, Gopalpur-on-Sea

During the month two local surveys have been conducted one each at Bahuda River Estuary and Subhadra Estuary on 21 and 24 November, 2013, respectively. Seventy-five specimens of Amphipoda have been collected from these surveys. A total of 6 species under 4 genera and 4 families of molluscs have been identified from 39 examples from collections of Himachal Pradesh. Six mollusks species belongs to 5 families and two species of aquatic Hemiptera studied under 2 genus and 2 families from 6 examples as well as one species of Coleoptera studied under one genus and one family from 4 examples are identified from the collections of Narmada and Tapi surveys. One species of Amhipod identified under one genus and one family from 30 examples collected from Bahuda Estuary, Ganjam. A total of 4 mollusca species under 4 Families

have been identified from 12 examples of mollusks; one species of aquatic Hemiptera belonging to one genus and one family and one species of crab identified under one genus and one family from 3 examples have been studied from the collections made during surveys at Subhadra Estuary, Ganjam, Odisha. A team of 37 undergraduate students with H.O.D and faculty members from Department Of Zoology, Rabindra Mahavidyalaya, Champadanga, West Bengal has visited the National Zoological Collections at the Centre in course of their study tour. Dr Shantabala Gurumayum, Scientist-C of the Centre has attended a training programme on *Biodiversity Conservation*, Wildlife Institute of India, Dehradun, from 11-15 November, 2013. During the month, 19 museum specimens have been digitized and their metadata entered.



*Gyraulus convexiusculus* (Hutton)



*Macrochlamys (Euaustenia) cassida* (Hutton)



*Bellamya dissimilis* (Muller)



*Ranatra elongata* Fabricius



*Microvelia* sp.



A team from Dept. of Zoology, Rabindra Mahavidyalaya, Champadanga, West Bengal visited EBRC and had discussions with the staff.

## Sunderbans Regional Centre, Canning

Eighteen specimens of insects have been identified and registered by the scientific staff of the Centre, which includes 09 examples of Orthoptera, 07 examples of Odonata and 02

examples of Lepidoptera. During the month, 15 school students with their teachers visited our museum.

## Northern Regional Centre, Dehradun

Two general faunistic surveys have been undertaken in eight districts of Punjab and representative fauna collected, besides recording 2 species of reptiles, 55 species of birds and 12 species of mammals. Faunal identification during the month includes two species of Amphibia, 5 species of Lepidoptera, 12 species of Soil Nematodes, 4 species Acridoidea and 8 species of Coleoptera all

collected from Punjab. Besides, 6 species of Soil Nematodes from Sultanpur National Park, Haryana and 11 species of nematode from Govind WLS (Uttarakhand) have also been recorded during the month.

DNA extracted and quantified from old skins (ZSI collection) of *Felis chaus* (Screber) and Golden cat. Cyt b gene amplicons obtained for *Pardofelis temminckii* and Golden cat in



duplicate; while COI gene was amplified using Universal primers for three species belonging to Lucaenidae family.

During the month, 150 permanent slides of nematodes have been prepared; all the nematodes have been collected from Punjab, Sultanpur NP and Govind WLS surveys, mostly for morphological studies. During the month, we have registered 32 examples of Amphibians, 10 examples of Coleoptera and 125 examples of soil nematodes. In November we have digitized 30 Amphibians and their metadata entered accordingly.

Dr. P.C. Tak, Scientist-D has been nominated by DZSI to attend a workshop on "Mountain Specific Research in the context of Himalaya" held at Indian National Science Academy, New Delhi. The workshop has been organized by GBPIHED, MOEF, and ICIMOD on 19 and 20 November, 2013.

Dr A. N. Rizvi, Scientist-C has delivered a

lecture at Dolphin Institute of Biomedical & Natural Sciences, Dehradun, to the students of B.Sc. (Biotech) and M.Sc. (Zoology) on Molecular Taxonomy and DNA barcoding. Drs. S.I. Kazmi, and Narender Sharma, Scientist-C have delivered lectures on the collection, preservation, registration and maintenance of Hymenopteran specimens to the students of Dolphin (PG) Institute of Biomedical and Natural Sciences, Dehradun at NRC Laboratory. While, Shri. Parmod Kumar, Asst. Zoologist, has delivered a lecture-cum-demonstration on collection, preservation, registration and maintenance of Pisces to the students of Dolphin (PG) Institute of Biomedical and Natural Sciences at NRC Laboratory. Dr. Archana Bahuguna, Scientist- C, has attended a meeting at the Survey of India on Bharat Mantralaya, Raj Bhasha Vibhag, Nagar Rajbhasha Karyavan Samiti, Chamahi Baithak.

### Fauna Observed during Punjab surveys



*Hemidactylus brooki* Gray



Striped keelback *Amphiesma stolata* (Linnaeus)



White-breasted  
Kingfisher *Halcyon*  
*smyrnensis*  
(Linnaeus)



Black-winged Stilt *Himantopus himantopus* (Linnaeus)

### Marine Aquarium & Regional Centre, Digha

During the month, around 324 examples of live marine ornamental exhibits have been collected for exhibition in aquarium galleries. Our aquarium received tourists at an average of 320 per day. In total, 80 specimens have been identified which includes 37 species (23 species of fishes and 14 molluscs). The identified specimens include *Minous pictus* Gunther, 1880 and *Ophichthus lithinus* (Jordan

& Richardson, 1908) –the first report from Indian waters and *Hirundichthys speculiger* (Valenciennes 1847) which is new to West Bengal coast.



*Minous pictus*



*Ostichthys acanthorhinus*



*Ophichthus lithinus*

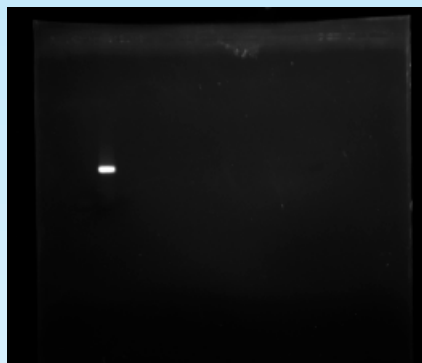
### Freshwater Biology Regional Centre, Hyderabad

Scientific staff of the Centre have examined 53 examples of molluscs from the collections of various wetlands of Andhra Pradesh and identified as 11 species viz. *Melanoides peddamunigalensis*, *Terebia granifera*, *Terebia lineate*, *Segmentina trochoidea*, *Gyraulus labiatus*, *Gyraulus covexiusculus*, *Angulyagra microchactophora*, *Bellamya bengalensis*, *Bellamya crassa*, *Bellamya dissimilis*, *Hygrobatus longipalpis* and on analysis of Zooplankton samples four species of ostracods viz. *Heterocypris favosa*, *Hemicypris falcatus*,

*Plesiocyprisdispar*, *Candonopsis putealis*; five species of cladocerans viz. *Ceriodaphnia cornuta*, *Diaphanosoma sarsi*, *Macrothrix spinosa*, *Dunhevedia crassa crassa*, *Alona davidi davidi* and three species of rotifers viz. *Brachionus diversicornis*, *Lecane papuana*, *Lecane leontina* have been identified.

As part of the molecular taxonomy, the DNA Barcode laboratory of the Centre has isolated DNA and PCR amplified product from two species of insects *Rantra filiformis* and *Diplonychus rusticus*.

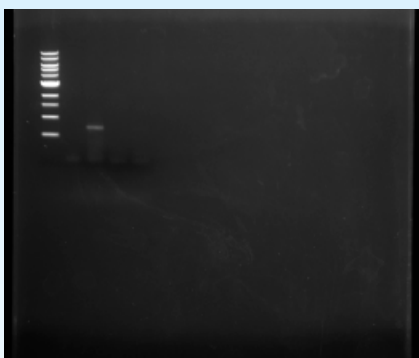




P C R  
Amplification  
of Cytochrome  
C Oxidase  
subunit I gene  
of *Diplonychus  
rusticus* size of  
approximately  
650 bp on 0.8%

Agarose gel. Lane 2: Negative control, Lane 3:  
PCR Amplification of *Diplonychus rusticus*

P C R  
Amplification  
of Cytochrome  
C oxidase  
subunit I gene  
of *Ranatra  
filiformis* size  
between 600-  
700bp was



observed on 0.8 % Agarose gel.

Lane 1: 1kb DNA marker

Lane 2: Negative Control without DNA

Lane 3: PCR Amplification of *Ranatra filiformis*

As part of the digitisation of the freshwater  
fauna, 48 specimens have been digitized  
pertaining to eleven species of fishes, one  
species of bivalve, two species of amphibians  
and three species of reptiles.



*Sitana ponticeriana*

Dr. R.K. Agrawal, Deputy Secretary and Shri.  
N.A.Siddique, Under Secretary of Ministry of  
Environment & Forests, New Delhi visited the  
Centre on 6 November, 2013 for O&M  
inspection.

A group of village Biodiversity Management  
Committee (BMC) members of Andhra  
Pradesh visited the Centre under Foundation  
for Revitalization of Local Health Tradition  
(FRLHT) organized by AP Forest Biodiversity  
Institute on 13 November, 2013 and delivered  
lectures on importance of biodiversity.

As part of Identification and advisory  
services, library facilities and literatures on  
aquatic insects have been provided to Ms.  
Rakhi, Research Scholar from Cochin  
University. Also general information on  
faunal collections of the Centre has been  
provided the students of St. Ann's College for  
Women, Mehdiapatnam, Hyderabad who  
visited FBRC on 27 November, 2013.

Dr. Prasanna Yennawar, Scientist-C has  
attended 'All India Conference on Official  
Language - Special Hindi Programme'  
organized by CENTAD, Bangalore at  
Kanyakumari from 14-16 November, 2013.



*Fejerarya limnocharia*

*Parreysia (Parreysia) faidens var. deltae**Ophisops jerdonii*

### Arunachal Pradesh Regional Centre, Itanagar

During the month, old collections of 11 fishes and 30 butterflies have been photographed and digitized. Scientific staff of the Centre have collected 12 species of butterflies, 8 species of Noctuidae moths, and 2 dragonflies from the ZSI campus. Thirty-one examples of recently collected fishes have been studied and identified as belonging to 5 species under 4 families. Among the identified species, *Parachiloglanis hodgarti* has been collected for the first time by APRC scientists from West Kameng district by Dr. B. Sinha and party. During the month, 5 species of butterflies

have also been identified. All the newly identified species have been given with news registration nos. and their data computerized.

*Parachiloglanis hodgarti*

### Central Zone Regional Centre, Jabalpur

During the month, 10 species of moths (Lepidoptera), 5 species of Mammalia (Muridae, Sciuridae and Chiroptera), 1 species of Mollusca (Gastropoda) and 7 species of Arachnida (spiders) have been identified and registered from the recent collections made in Madhya Pradesh. Identification and advisory services have been rendered to (i) Dr. Varsha Zade, Associate Professor, Department of

Zoology, Govt. Vidarbha Institute of Science & Humanities, Amravati, Maharashtra for identification of mammalian bones isolated from pellets of owl and have been identified into 4 species and 3 genera; (ii) to Dr. Ashish D. Tiple, Vidyabharti college, Seloo, Wardha, Maharashtra for identification of 14 species of Odonata specimens belonging to 11 Genera collected from Central India. Identification



reports have been sent to the respective colleges. Dr. S. Sambath, Scientist-C and Officer-in-Charge visited Forest Research Institute (ICFRE), Dehra Dun for consultation of literature on Geometridae (Lepidoptera).

#### Publication

- Pradhan, M. S., and Talmale, S. S. (2013) Mammalia. Fauna of Karnataka. *State Fauna Series* 21: 495-595 (Published by Director, Zoological Survey of India, Kolkata).



*Polyura agraria* Swinhoe (Nymphalidae)



*Castalius rosimon* (Fabricius) (Lycaenidae)



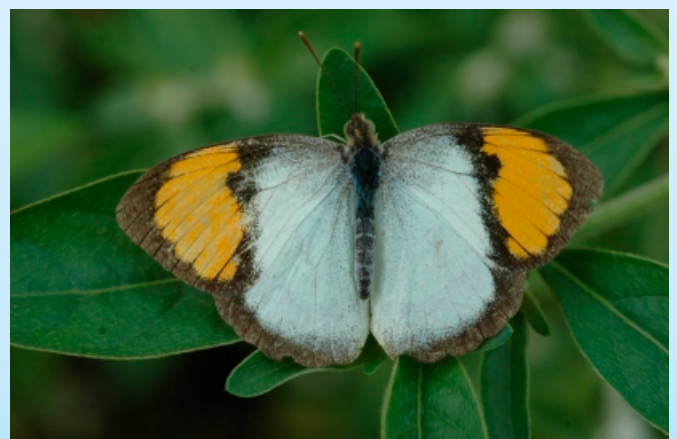
*Euchrysops cnejus* (Fabricius) (Lycaenidae)



*Freyeria trochylus* Freyer (Lycaenidae)



*Zizina otis* (Fabricius) (Lycaenidae)



*Ixias marianne* (Cramer) (Pieridae)



*Pelopidas mathias* (Fabricius)



*Catopsilia pyranthe* (Linnaeus) (Linnaeus)

## Desert Regional Centre, Jodhpur

During the month, scientific staff of the Centre have identified and registered 3 species of ants and 6 species of fish from the jurisdiction area. Three species of ants have also been identified from the A & N Islands. We have digitized 10 specimens from NZC for RFD. Dr. Sanjeev Kumar, Scientist-C and Officer-in-Charge has identified 4 species of amphibians, 14 species of reptiles, 171 species of aves and 19 species of mammals from the survey that lasted for 10 days from 20–29 October, 2013 of Jhunjhunun, Hanumangarh and Sri Ganganagar districts of Rajasthan.

Dr. Sanjeev Kumar, Scientist-C and Officer-in-Charge has attended a workshop on Capacity Building in Research Methods and Communication on 19 November, 2013 at SACON, Coimbatore. Besides, Dr. Kumar, also presented a research paper in the 2<sup>nd</sup>

International Conference on Indian Ornithology: Ecosystem Services & Functions of Birds held from 19-23 November, 2013 at SACON, Coimbatore and co-chaired the session entitled Symposium: Bird Ecosystem Associations in aforementioned conference. Mrs. Neena Tak, Assistant Zoologist has attended Rajbhasha Karyanvayan Samiti, meeting at DRM Office, Jodhpur on 20 November, 2013.

### Publication

- Kumar, S. (2013) Diversity and status of wetland birds in Kachchh Biosphere Reserve beyond India bridge, Gujarat. In: Proc. 2<sup>nd</sup> International Conference Indian Ornithology: Ecosystem Services & Functions of Birds: 141-143, SACON, Coimbatore, India (Eds. Jayapal *et al.*).



Dr. Sanjeev Kumar presenting research paper in the 2<sup>nd</sup> International Conference on Indian Ornithology held from 19-23 Nov., 2013 at SACON, Coimbatore.



Dr. Sanjeev Kumar attending workshop for Capacity Building in Research Methods and Communication on 19-11-2013 at SACON, Coimbatore.



## Marine Biology Regional Centre, Chennai

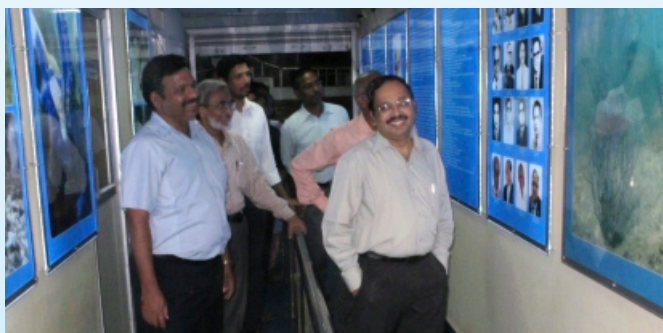
Extensive field survey has been undertaken along the Palkbay region, Tamil Nadu and representative samples have been collected. Scientists of this Centre identified eleven species of Tintinnids, ten species of Nematodes, eighteen species of Bryozoans, fourteen species of Arthropoda, twenty five species of Mollusca, and three species of Pisces out of the materials collected from Palkbay and Gulf of Mannar Biosphere Reserve. Eighty one species have been digitized and their metadata compiled. Dr. Rajkumar Rajan Scientist-C has attended a special programme on the official language implementation and terminology organized by Centre for Training & Development, Bangalore at Kanyakumari.

Dr. C. Venkatraman, Scientist-C & Officer-in-Charge has attended an Institutional Animal Ethics Committee (IAEC) meeting at Sri Ramachandra Medical University and at GLR laboratories, Madhavaram as External Scientist nominated by Animal Welfare Division, MoEF, New Delhi. Dr. Balakrishna Pisupathi, Chairman, National Biodiversity

authority and Dr. K.P. Laladhas, Member Secretary, Kerala State Biodiversity Board have visited various research facilities available in our Centre. Drs. C. Venkatraman and Rajkumar Rajan, have supervised the research projects of SRF's of the Centre. One advisory service has been rendered to Education Officer, WWF -India, Tamil Nadu State Office, Chennai regarding Tamil names for marine organisms. During the month, around 1200 tourists visited our marine aquarium and museum.

### Publication

- Kurien, J., and Venkatraman, C. (2013) Factors influencing migratory waterbirds to select Kachchh district of Gujarat, Western India as a stopover site during migration. Pp. 53-56. *In*: Jayapal, R., Babu. S., Quadros, G., Arun, P.R., Pramod, P., Kumura, H.N., and Azeez, P.A. (Eds.). Ecosystem services and functions of Birds. Proceedings of the 2<sup>nd</sup> International Conference on Indian Ornithology, 19-23 November, 2013. Salim Ali Centre for Ornithology and Natural History, Coimbatore, India. 232pp.



Dr. Balakrishna Pisupathi, Chairman, National Biodiversity Authority on his visit to MBRC Marine aquarium



*Balistoides viridescens*



*Canthigaster solandri*



*Canthidermis maculata* (Bloch, 1786)

*Psammoperca waigiensis**Lethrinus ornatus*

### Gangetic Plains Regional Centre, Patna

During the month, scientific staff of the Centre have identified 17 species of Molluscs such as *Digoniostoma pulchella*, *Lymnaea accuminata*, *Corbicula striatella*, *Pila globosa*, *Bellamya bengalensis*, *Idiopoma dissimilis*, *Lymnaea acuminata*, *Radix luteola*, *Radix ovalis*, *Indoplanorbis exustus*, *Gyraulus convexiusculus*, *Gyraulus euphraticus*, *Hippeutis umbilicalis*, *Quickia bensoni*, *Corbicula striatella*, *Pisidium clarkeanum* and *Lamellidens marginalis*.

Dr Navneet Singh, Scientist-C has identified the moth collections (Noctuidae, Tortricidae, Spingidae) brought by Mr Anand Kumar Thakur, Assistant Professor of Zoology, S.S. Memorial college, Ranchi University, Ranchi. Dr Gopal Sharma, Scientist-C has delivered a

lecture on 'Promoting Bird Tourism in Ganga river from Patna to Kahalgaon w.s.r. to Vikramshila Gangetic Dolphin Sanctuary (IBA-IN-BR-11) in Bihar, India' in the 5<sup>th</sup> Bihar Science Conference from 16-18 November, 2013 at Sri Arvind Mahila Mahavidyalay, Patna.

#### Publication

- Kirti, J. S., Singh, N., and Joshi, R. (2013) First record of the genus *Conilepia* Hampson (Lepidoptera: Erebidae: Arctiinae) from India with the description of a new species. *Deutsche Entomologische Zeitschrift* 60 (2): 231-234. (DOI [10.1002/mmnd.201300029](https://doi.org/10.1002/mmnd.201300029))

*Conilepia hunliensis* Kirti Singh Joshi 2013; (female)*Conilepia hunliensis* Kirti Singh Joshi 2013; (male)



### Western Regional Centre, Pune

During the month, 2 species of Collembola, 4 species of Coccinillidae, 6 species of Hymenoptera, 7 species of Odonata, 5 species of Coleoptera, 19 species of Pisces and 2 species of Amphibia have been identified. Identification and advisory services have been rendered to the Forest Department, Satara, Maharashtra on the identification of 2 skins as Leopard skins. One live specimen of reptiles

has been identified for the Forest department, Karad, Satara.

#### Publication

- Rema Devi, K., Indra, T.J., Yadav, B.E., Raghunathan, M.B., Krishnan, S., and Jadhav, S.S. (2013) Freshwater Fishes. *Fauna of Karnataka, State Fauna Series*, 21: 239-276. Published by the Director, Zool. Surv. India, Kolkata.



*Euthalia aconthea* (Hewitson)



*Anthia sexguttata* (Fabr)

### North Eastern Regional Centre, Shillong

A one-day field trip has been undertaken in Pnah Kyndeng, Pahambir village near Nongpoh, Ri-Bhoi district, Meghalaya on 28 November, 2013 for studying the bat fauna inhabiting in the area. During the month, 152 specimens of fishes belonging to 20 species and 4 specimens of amphibian belonging to 3 species have been identified from the lot collected from recent surveys. A total of 147 specimens of aquatic and semi-aquatic Hemiptera belonging to 11 species and 60 specimens of freshwater mollusca belonging to 5 species and 116 specimens of crustacean (Prawns) belonging to 6 species have been identified and registered from the backlog collections.

During the month, we have digitised 10 specimens of mammals and 152 specimens of fishes and their metadata entered. Physical verification of 651 specimens of amphibian and 152 specimens of fishes have been done from the identified collections. A total 148 specimens of unidentified decapods (crabs) have also been physically verified.

Dr. A.K. Ghosh, Former Director, Zoological Survey of India and a team of three scientists have visited the Centre on 28 November, 2013. A teacher from Lady Keane College, Shillong visited the library of the Centre and purchased some of the ZSI publications on 28 November, 2013.



A colony of bats *Rousettus leschenaultii* (Desmarest, 1820) in a cave at Pnah Kyndeng, Pahambir near Nongpoh in Ri-Bhoi district, Meghalaya.



An indigenous way of fish trapping at Umsaw River, Ri-Bhoi district, Meghalaya.

### High Altitude Regional Centre, Solan

In November, faunistic identification from the Centre includes 03 species of butterflies (out of 10 examples); 01 species of earthworms (out of 01 examples) and 01 species of Pisces (out of 02 examples) from the Cold Desert of Spiti Valley, district Lahaul & Spiti (HP) and 05 species of butterflies (out of 53 examples); 03 species of Pisces (out of 15 examples); 04 species of Orthoptera (out of 8 examples); 04 species of earthworms (out of 26 examples) from Chail WLS, district Solan. More than 300

photographs of birds, butterflies and habitats from Ladakh, Spiti, Kalatop, Churdhar, Simbalwara, and Pangi representing various protected areas and remote trans-Himalayan ecosystems of north-west India have been edited and sorted out for development of LED frames for HARC, Museum. Photographs of 32 mammals of National Zoological Collections have been taken and being compiled in RFD format.

A Scientist of Centre has attended a



Workshop on “Mountain Specific research in context of Himalayas” held at The Indian National Science Academy, Bahadur Shah Zafar Marg, New Delhi organized by ICIMOD, Kathmandu, Nepal and G.B. Pant Institute of Himalayan Studies, Almora, Uttarakhand from 19-20 November, 2013; participated in various sessions and acted as Reporter in Special session-II: Voice of Himalayan researchers on 19 November, 2013. A Scientist of the Centre has also submitted an abstract in International Entomological Conference.

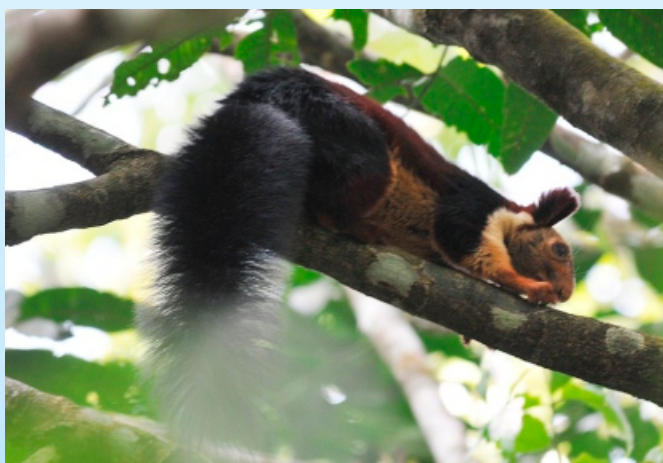
The Town Official language implementation committee meeting at Micro, Small & Medium Enterprise-Development Institute, Solan on 28 November, 2013 has been attended by Officer-in Charge. A scientist of the Centre has participated in a one-week training workshop on “Biodiversity Conservation” at the Wildlife Institute of India, Dehradun from 11-15<sup>th</sup> November, 2013. A scientist from the Centre has participated in 2<sup>nd</sup> International Conference on Indian Ornithology from 19-23 November, 2013 held at SACON, Coimbatore and co-chaired the session titled, 'Birds in Agro-ecosystems' on 21 November, 2013. A scientist of the Centre has attended an enquiry on identification of butterflies from Punjab Agriculture University, Ludhiana (Punjab). One Research Scholar got registered for Ph.D Degree in Punjabi University, Patiala working on Systematic of family Nymphalidae of North-West India.

### Publications

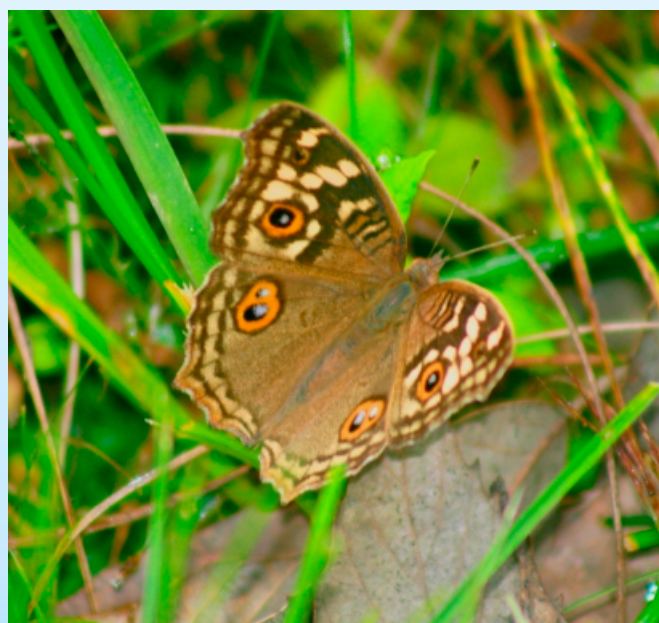
- Kumar A. (2013). Physical characteristics and context of production of vocalizations in Red-headed Tit, *Aegithalos concinnus* (Aves: Aegithalidae). *Annals of Forestry*, 21(1): 113-121.
- Kumar, A. (2013). Song system in an ecologically important songbird the Oriental Magpie Robin *Copsychus saularis*, Pp. 25-27. In: *Ecosystem services and Functions of Birds*, Proceedings of the second International Conference on Indian Ornithology, Jayapal R., Babu S., Quadros G., Arun P.R., Pramod P., Kumara H.N. and Azeez P. A. (Eds.), SACON, Coimbatore, India, 19-23 November, 2013, 232 pp.



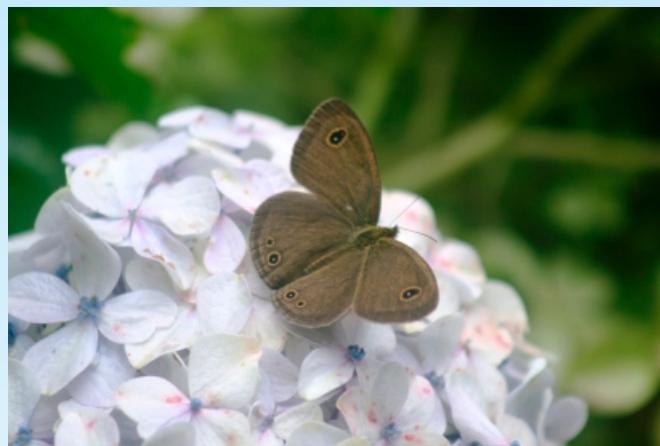
Town Hindi Implementation Committee meeting on 28.11.2013



Indian Giant Squirrel (*Ratufa Indica*)



*Junonia almana*

Small sunbird (*Leptocoma minima*)*Ypthima inica*

### Southern Regional Centre, Chennai

During the month, as per the Annual Program of Research, a combined survey tour has been conducted in the Western Ghats of Tamil Nadu (Kanyakumari, Tirunelveli, Viruthunagar and Theni districts) lead by Dr. S. Prabakaran, Scientist-C from 6-22 November, 2013 (17 days) and the team members have collected 2698 examples of various faunal groups. Specimens of Trichoptera and Plecoptera have also been collected by the participating scientists Drs R. Babu and S. Prabakaran, respectively. Higher vertebrates observed in the field have been photographed. Five species of Odonata belonging 4 genera, 1 order under 1 family out of 16 specimens have been identified from the earlier survey of Javadi Hills, Tamil Nadu that are now present in the National Zoological Collections of Southern Regional Centre.

Nearly, 180 examples of freshwater and land gastropods belonging to 13 species under 10 genera of 7 families have been identified from the existing collection of NZC-SRC Chennai. 10 reptile specimens have been identified as 4 species from 2 genera under 2 families collected from the Western Ghats of Tamil Nadu. Identification of zooplankton samples

collected from different localities of Thiruvannamalai district of Tamil Nadu include 9 examples of Protozoa belonging to 3 species, 2 genera, 1 order, 2 families; 10 examples of Rotifera belonging to 5 species, 4 genera, 1 orders, 3 families; 34 examples of Cladocera belonging to 9 species, 8 genera, 2 orders, 5 families and 11 examples of Ostracoda belonging to 4 species, 2 genera, 1 order, 1 family.

During the month, 10 species of Grasshopper specimens collected from the Eastern Ghats have also been identified. Identification and advisory service rendered to Mr. P. Kumaresan, Lecturer from Govt. Arts College, Dharmapuri who collected fish specimens from Mettur Reservoir.

Dr. K. Ilango, Scientist-D & Officer-in-Charge has delivered two invited guest lectures (i) Biology of true flies (Diptera) with special reference to public health importance, (ii) Phlebotomine sand flies (Psychodidae: Diptera) in biology and medicine have been presented to the students of M.Sc. of Public Health Entomology at Vector Control Research Centre (ICMR), Pondicherry on 19 November, 2013. Dr. K. Ilango, also has delivered a plenary lecture on 'Wetlands and



Vector Borne Diseases' at the 3<sup>rd</sup> International Congress on Global Warming on Insect Diversity: Management and Conservation Strategies' being organized by the Department of Zoology, Bharathiar University, Coimbatore from 26-28 November, 2013.

#### Publications

- Aengals, R., and Pradhan, M. S. (2013). Reptiles. In: *Fauna of Karnataka, State Fauna Series*, 21: 435-465, Zoological Survey of India, Kolkata.
- Babu, R., Subramanian, K.A. and Nandy, S. (2013) Endemic Odonates of India. *Rec. zool. Surv. India Occasional Paper* No. 347: 1-60.
- Ilango, K. (2013) An overview. In: *Fauna of*

*Karnataka, State Fauna Series*, 21: 1-6. Zoological Survey of India, Kolkata.

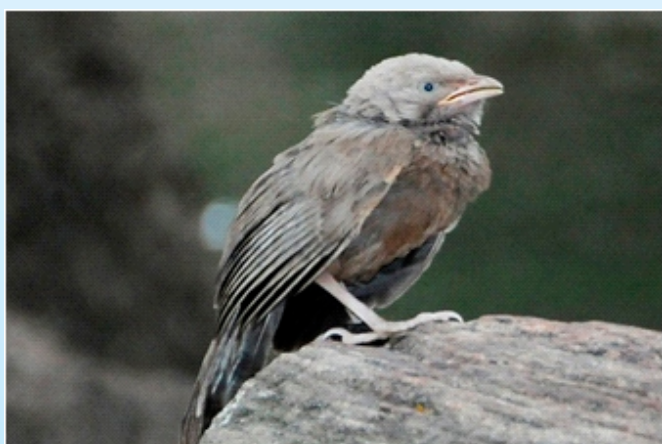
- Ilango, K. (2013) Psychodidae: Diptera: Insecta. In: *Fauna of Karnataka, State Fauna Series*, 21: 185-186. Zoological Survey of India, Kolkata
- Thirumalai, G., Aengals, R., Krishnan, S., and Prabakar, D. (2013) Aves. In: *Fauna of Karnataka, State Fauna Series*, 21: 467-493. Zoological Survey of India, Kolkata.
- Thirumalai, G., and Prabakar, S. (2013) Insecta: Hemiptera: Membracidae. In: *Fauna of Karnataka, State Fauna Series*, 21: 129-132. Zoological Survey of India, Kolkata.



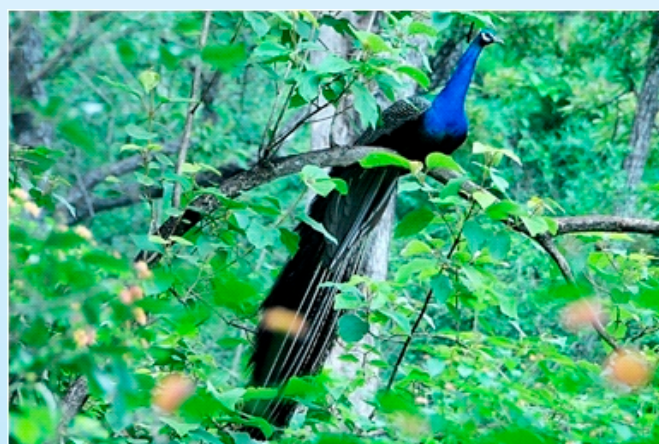
*Trithemis aurora* (Burmeister, 1839) (at Anaimalai Tiger Reserve)



*Bradinopyga geminata* (Rambur, 1842) (at Anaimalai Tiger Reserve)



*Turdoides striata* Dumont, 1823 at Anaimalai Tiger Reserve



*Pavo cristatus* Linnaeus, 1758 (at Mudumalai Tiger Reserve)

## ANIMAL OF THE MONTH

**Hispid hare** *Caprolagus hispidus* (Pearson 1839)

The Hispid Hare *Caprolagus hispidus* endangered. They still exists in a few isolated pockets across the former range of their tall grassland habitat in northern India and southern Nepal. There is so little known about the animal. Till today only little data has been collected on the habits, breeding biology, litter size, breeding seasonality etc. Its distribution pattern can be exclusively equated with the availability of the tall grass savannah that typically occurs along the southern edges of the Himalayan foothills. Its apparent scarcity is not merely a function of the remoteness of their distribution. This known scarcity has been attributed to the limited distribution and to habitat destruction though the real species situation and its underlying causative factors have been poorly understood. Grassland burning as a management practice all over their distribution ranges of this species is



Text and photo by Gopinathan Maheswaran, HQ office, ZSI, Kolkata

considered to be a prime factor behind its declining population. Since the breeding season of the Hispid Hare coincides with the season when Forest authorities burn the grasslands, and this is obviously a bad time for them to have young. As a result of heavy biotic pressure and decline in the area, the important dependent animal species of these grasslands are either confined to a few isolated patches of grasslands in the protected areas. The Hispid Hares were formerly quite widely distributed along the foothill belt from eastern Uttar Pradesh, through southern Nepal, Sikkim, North Bengal to north-western Assam, though it has been declining steadily over the past few decades. This distribution pattern can be exclusively equated with the availability of the tall grass Savannah that typically occurs along the southern edges of the Himalayan foothills.

## OUT OF THE BOX

**First example of tool use in reptiles**

<http://news.sciencemag.org/plants-animals/2013/12/scienceshot-first-example-tool-use-reptiles>

**Pune zoologists find 2 new species of freshwater crabs**

<http://timesofindia.indiatimes.com/home/environment/flora-fauna/Pune-zoologists-find-2-new-species-of-freshwater-crabs/articleshow/26330136.cms>

**Scientists identify the world's most irreplaceable protected areas**

<http://www.birdlife.org/worldwide/news/scientists-identify-world%E2%80%99s-most-irreplaceable-protected-areas>

**Ancient cat may reshape feline family tree**

<http://news.sciencemag.org/biology/2013/11/ancient-cat-may-reshape-feline-family-tree>

**Brain gain: Secret of crows' intelligence decoded**

<http://timesofindia.indiatimes.com/home/science/Brain-gain-Secret-of-crows-intelligence-decoded/articleshow/26715340.cms>

**Concern over dwindling horseshoe crab population**

<http://www.thehindu.com/todays-paper/tp-national/concern-over-dwindling-horseshoe-crab-population/article5435212.ece#.UqPftSGg5vM.gmail>