



ZSI e-NEWS

The Monthly Electronic Newsletter of Zoological Survey of India

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August 2013

ZSI in the 98th years of Service to the Nation (1916 to 2013)

From the Director's desk

A couple of months back, I wrote to you all about ZSI's online e-Journal PROMMALIA that has been launched to publish scientific papers related to animal science in general, and taxonomy in particular. Recently, we have modified the submission procedure by introducing online process wherein all authors shall submit their articles at www.biotaxa.org/Prommalia. This, we have done only to speed up the entire process right from submission to getting the paper reviewed and uploaded within a short span of time, if suitable for publication. Furthermore, we have created an archive from where one can also retrieve his or her paper(s) at a later date. We are still working on other modalities in line with many of the international Journals to have DOI number for each article and ZOOBANK registration number for each new species and new genus apart from a separate ZOOBANK number for the each paper that is published online in PROMMALIA. All these things have been considered by us only to improve aesthetic value of the Journal. Nonetheless, we are also contemplating on an idea of including more subject editors from outside of ZSI to increase the peer review process so that scientific content of each paper in PROMMALIA is also at par with many of the reputed Journals. Though, it looks ambitious, but achievable if we set our goal firmly. At this juncture, my earnest request to you all is to submit quality papers to PROMMALIA and the rest is assured from our side that your hard work gets due recognition from scientific community.

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

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Headquarters, Kolkata

During the month, extensive field surveys have been undertaken in the States of Himachal Pradesh, Maharashtra, Chhattisgarh and West Bengal. In addition to that, local surveys have been undertaken in Sundarban Biosphere Reserve, West Bengal. Scientists of HQ have identified 8 species of Protozoa, 8 species of soil and plant parasitic Nematodes, 2 species of Platyhelminthes, 4 species of Crustacea, 4 species of Collembola, 23 species of Hemiptera, 4 species of Odonata, 9 species of Coleoptera, 3 species of Hymenoptera, 4 species of Orthoptera, 9 species of from general nonchordata section of HQ office, 41 species of Fishes and 3 species of Mammals from the States of Himachal Pradesh, Maharashtra, Odisha, Tamil Nadu, Andhra Pradesh, Assam, Chhattisgarh, Kerala, Tripura, Uttar Pradesh, West Bengal and Andaman and Nicobar Islands.

Courtesius illuminates Distant (Hemiptera: Pyrrhocoridae) recorded for the first time from India. Similarly, *Dorylaimus thornei* Andrassy, 1969 has been recorded for the first time from India. *Dorylaimus neominimus* Gantait, Bhattacharya & Chatterjee, 2010; *Aporcelaimellus heynsi* Baqri & Jairajpuri, 1968; *Thonus garhwaliensis* Ahmad *et al.*, 1986 are new records for Himachal Pradesh.

The species *Delta esuriens* (Fabricius) (Hymenoptera: Vespidae: Eumeninae) has been reported for the first time from Andhra Pradesh, Chhattisgarh, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Manipur, Meghalaya, Sunderbans Biosphere Reserve, West Bengal and Uttar Pradesh. The species/subspecies *Polistes (Gyrostoma) rothneyi krombeini* Van der Vecht (Hymenoptera: Vespidae: Polistinae) reported for the first time from Malabar Wildlife Sanctuary, Kerala.

During the month, 2 Holotypes and 10 Paratypes of the species *Scolopsis igcarensis* Mishra *et al.*, 2013 submitted by S.S. Mishra, Z.S.I., Kolkata (7 ex); and *Pethia betwaensis*, submitted by B.K. Biswas, CIFRI, Barakpore,

Kolkata (5 ex.) have been deposited with the National Zoological Collections at ZSI.

Identification and advisory services have been rendered on twenty nine lots of specimens, received from different institutions from across the country. In addition to that, identification and advisory services have also been rendered on 23 specimens and accordingly identification reports have been sent as 3 separate reports to Dr. Sheela Roy, Assistant Professor, Dept. of Zoology, Vidyasagar College, Kolkata; identification report prepared on 31 specimens of fishes belonging to 7 species received from Mrs. Mithila Das, Lecturer in Zoology, S.N. College, Rajkanika, Odisha has been submitted to her and identification report about one specimen of fish received from Dr. Dipti Raut, Asstt. Prof., Ravenshaw University, Cuttack, Odisha has also been submitted. Report on the crab specimens sent by Dr. K. K. Satpathy, SO/H, Head, Environmental and Safety Section, Indira Gandhi Centre for Atomic Research, Kalpakkam, Tamil Nadu also submitted accordingly.

Four specimens of confiscated Guitarfish and Sting rays received from D.F.O., 24 Parganas (South) Division, Alipore, Kolkata and one piece of sting ray skin received from the Regional Deputy Director, Wildlife Crime Control Bureau, A.J.C. Bose Road, Kolkata have been identified and reports submitted accordingly.

Similarly, a box containing 60 examples of sea horse belonging to 5 species has been received from the D.F.O., Baikunthapur Division, Siliguri, West Bengal. All the specimens have been identified and reports submitted.

Dr. K. Venkataraman, Director, has attended a workshop on the "Biodiversity Informatics and Ecological Sciences in India" at French Institute of Pondicherry on 6 August, 2013. He also attended a meeting at National Biodiversity Authority, Chennai and visited ZSI's Regional Centres (MBRC and SRC) at Chennai between 1 and 11 August, 2013. ZSI celebrated

Independence day celebrations on 15 August 2013 at HQ office and honoured meritorious students of ZSI officers and staff. He has attended the Rajiv Gandhi Wildlife Conservation Award-2009 ceremony and Amrita Devi Bisnoi Wildlife Protection Award-2010 during the 'National Workshop on Developing Strategies for Mitigation of Human Wildlife Conflicts' on 20 August, 2013 at India Habitat Centre, New Delhi and on 21st August attended ABS meeting in NBA, Chennai, respectively. Dr. Venkataraman, has acted as a Chairman of an interview board that met to select the project personnel for the post of Field Collector-cum-Assistant at Jamnagar on 16 August, 2013 under the project "Gulf of Kachchh Coral Transplantation/Restoration". Dr. Venkataraman, has attended a meeting to finalise the road map and organizing committee for the National Taxonomy Congress between 20 and 24 August, 2013 at the Ministry of Environment and Forests (MoEF), New Delhi and Chennai.

On 27 August, 2013, Dr. K. Venkataraman, Director, along with Dr. K.C. Gopi, Scientist-E, Dr. Gaurav Sharma, Scientist-C and Dr. Basudev Tripathy, Scientist-C has attended a meeting held at the chamber of the Director, Indian Museum, Kolkata and discussed issues related to modernization of ZSI Fauna Galleries displayed in Indian Museum.

Dr. Kailash Chandra, Scientist-F and Additional Director, has attended the Rajiv Gandhi Wildlife Conservation Award-2009 ceremony award ceremony and Amrita Devi Bisnoi Wildlife Protection Award-2010 during the 'National Workshop on Developing Strategies for Mitigation of Human Wildlife Conflicts' on 20 August, 2013 at India Habitat Centre, New Delhi. Dr. Chandra, also attended a meeting regarding the preparedness of 'National Taxonomy Congress, 2013' and Expenditure for XII Five Year Plan, for the year 2013-14 under the Chairmanship of Additional Secretary on 20 August, 2013 at the Ministry of Environment & Forests, New Delhi.

Dr. Gaurav Sharma, Scientist-C has identified

the material received from Deputy Field Director, Buxa Tiger Reserve (E), Alipurduar Court, West Bengal as that of a piece of Asian elephant tusk and the material received from the D.F.O. Baikunthapur Division, Rabindra Sarani, Siliguri, West Bengal as that of the Chinese Pangolin, *Manis pentadactyla*. During the month, Dr. Gaurav Sharma, Scientist-C has reviewed a paper received from the Chief Editor, Biological Forum-An International Journal. Sharma has participated in the training program on "Current Requirements in Environmental Impact Assessment (EIA) Process and Procedures as per MoEF guidelines" at Engineering Staff College of India, Hyderabad from 12-14 August, 2013.

Publications

- Hassan, M. E., Biswas, B and Praveen, K. (2013) First record of *Courtesius Illuminates* Distant (Hemiptera: Pyrrhocoridae) from India, *Biolife* 1(3): 93-95.
- Kumar, P.G. (2013) Redescription and new distributional records of *Delta esuriens* (Fabricius) (Hymenoptera: Vespidae; Eumeninae) from Indian states. *Records of Zoological Survey of India* 112 (4): 55-60.
- Shareef, K.P.M., Kishore, L., and Kumar, P.G. (2013) New record of *Polistes* (*Gyrostoma*) *rothneyi* *krombeini* Van der Vecht (Hymenoptera: Vespidae: Polistinae) from Malabar Wildlife Sanctuary, Kerala. *Journal of Experimental Zoology, India*, 16 (1): 355-357.
- Chandra, K. (2013) Insect Species Diversity in Indian States and Union Territories: An Introduction. *WBBB e-Newsletter*, Vol. 4, No.2:11-17.
- Sharma, R.M., and Chandra, K. (2012) First report of *Thelyphonus sepiaris* (Butler, 1873). (Arachnida: Uropygi: Thelyphonidae) from Chhattisgarh, Central India. *Rec. zool. Surv. India*. 112 (4): 129-130.
- Chandra, K., Kushwaha, S., Biswas, S., Mukherjee, P., and Bal, A. (2013) Four new records of *Acanthaspis* Amyot and Serville, (Heteroptera: Reduviidae) from Chhattisgarh, India. *PROMMALIA*, I: 93-97.

- Ghosh, A., and Chakrabarti, S. (2013) Checklist of Indian Trematode Parasites from Amphibian hosts. *Rec. Zool. Surv. India*. Occ. Paper 346: 1-36.
- Prabakaran, K., Pal, R., and Chitra J. (2013)



Delta esuriens (Fabricius) (Hymenoptera: Vespidae: Eumeninae)



Dr. K. Venkataraman, Director, ZSI had a meeting with the Director of Indian Museum on 27 August, 2013.



Dr. K. Venkataraman along with the staff of ZSI visited the ZSI's faunal section displayed at the Indian Museum on 27 August, 2013.

Hydrobiological characteristics of freshwater habitats of South Dum Dum Municipality, North 24 Parganas District, West Bengal, India. *Journal of Academia and Industrial Research* 2(3):151154.

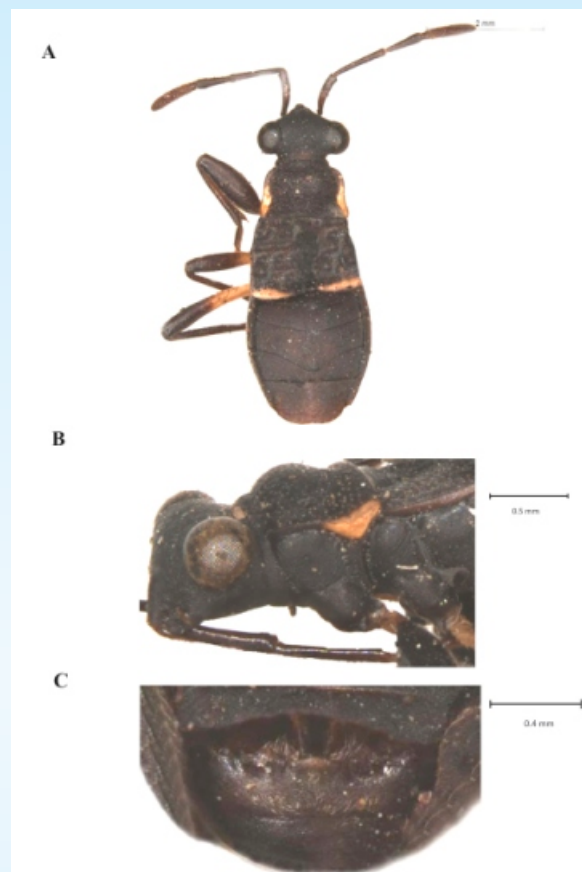


Fig. A-C. *Courtesius illuminates*: A. Dorsal View ♂, B. Head and Thorax (lateral view) ♂, C. Pygophor.

New record from India: *Courtesius Illuminates* Distant (Hemiptera: Pyrrhocoridae)





Dr. Gaurav Sharma and Party members during survey at Sundarban Biosphere Reserve.



During Independence day

Andaman & Nicobar Regional Centre, Port Blair

During the month, surveys have been conducted in Rutland Island, Chidyatapu, Burmanallah, Wimberligunj and Sippighat regions in South Andaman from 10-13, 21-23 and 28-30 August, 2013 to assess the marine and terrestrial faunal assemblages. These surveys resulted in a collection of a total of 311 species. Among them, 89 species of scleractinian corals, 17 species of gorgonids, 5 species of polyclads, 2 species of nemerteans, 7 species of sea anemones, 4 species of opisthobranchs, 6 species of echinoderms, 51 species of gastropods, 11 species of bivalves, 11 species of crustaceans, 6 species of opisthobranchs, and 23

species of fishes from marine habitat; while 3 species of mosquitoes, 4 species of insects, 3 species of butterflies, 2 species of amphibians, 12 species of reptiles, and 55 species of birds have been identified/observed from the terrestrial environments. The fishes *Pristiapogon exostigma* (D.S.Jordan & Starks, 1906); *Amphiprion melanopus* Bleeker, 1852; *Lepidozygus tapeinosoma* (Bleeker, 1856); *Stegastes aureus* (Fowler, 1927); brachyuran crab *Camposica retusa* Latreille, 1829; anomuran crab *Petrolisthes pubescens* Stimpson, 1858; and shrimp *Alpheus lobidens* De Haan, 1849; *Alpheus rapax* Fabricius, 1798 have been reported as new

records to the Andaman and Nicobar Islands. A total of 196 specimens comprised of 60 specimens of corals, 48 specimens of sponges, 55 specimens of molluscs, 11 specimens of crabs, 15 specimens of butterflies and 7 specimens of dipterans have been registered in National Zoological Collections of ZSI. During the month, a booklet entitled 'Glimpses of Great Nicobar Biosphere Reserve', 6 pamphlets depicting corals, echinoderms, molluscs, polyclads, opisthobranchs and sponges of Great Nicobar Island, and 6 charts viz. characteristic fauna, corals, ascidians, sea anemones, opisthobranchs and birds of Great Nicobar Island have been prepared. Comments on the UGC documents portraying the current scenario of Indian Higher Education as required for the perusal of Hon'ble Lt. Governor, Andaman and Nicobar Islands has been prepared and submitted to the Assistant Secretary (Higher Education), A&N Administration on request. ZSI's view on the comments of CMFRI and WII upon the report on Status survey of sea cucumbers in territorial waters of Andaman and Nicobar Islands' and photographs of birds of Andaman and Nicobar Islands have been provided to the Department of Environment and Forests, Andaman and Nicobar Administration on their request. Annual Report of ZSI/ANRC, Port Blair has been submitted to Pondicherry University as required. Dr. C. Raghunathan has provided the methodology for the estimation of echinoderms to Mr. Joseph, a PG student of

University of Philippines; reviewed a manuscript on corals for *Journal of Threatened Taxa*; served as a member of an interview committee for the recruitment of Group-C post (Multitask Staff) for Fishery Survey of India, Port Blair from 19-21 August, 2013; served as a Doctoral Committee Member in Pondicherry University on 22 and 27 August, 2013; conducted an interview for the admission of Ph.D. students in ZSI for the academic year 2013-14 in which Dr. C. Sivaperuman, Scientist-C is also one of the committee members. A new species of coral *Ctenactis triangularis* has been described and published.

Publications

- Mondal, T., and Raghunathan, C. (2013) Description of a new coral species *Ctenactis triangularis* (Scleractinia: Fungiidae) from Andaman Islands, India. *Journal of Threatened Taxa*, 5(12):4653-4659; <http://dx.doi.org/10.11609/JoTT.o3194.4653-9>
- Mondal, T., Raghunathan, C., and Venkataraman, K. (2013) Post bleaching assessment of Corals in Andaman & Nicobar Islands. *Proc. Zool. Soc.* DOI 10.1007/s12595-013-0080-5.
- Sivaperuman, C., Shah, S.K., Rajan, P.T., and Venkataraman, K. (2012) New record of Common Coot *Fulica atra* Linnaeus, 1758 from Andaman & Nicobar Islands. *J. Bombay Nat. Hist. Soc.* 109(3):199-200.



Seastar *Linckia guildingi* Gray 1840



Sea urchin *Echinometra mathaei* de Blainville 1825

Sea cucumber *Holothuria atra* Jaeger 1833*Periclimenes brevicarpalis* Schenkel 1902Opisthobranch *Phestilla lugubris*Brittle star *Ophiomastix annulosa* Lamarck 1816

Western Ghat Regional Centre, Kozhikode (Calicut)

During the month, two new species of Platygastriidae (Hymenoptera) have been described. Other identification work includes 12 species of Pteromalidae (Hymenoptera), 4 species of Platygastriidae (Hymenoptera), 4 species of Odonata (Insecta), 2 species of Lepidoptera, 3 species of Dermaptera and 3 species of Reptilia collected from the southern Western Ghats. *Coptera occispinosa* Rajmohana & Narendran (Hymenoptera: Diapriidae) has been elevated to a new genus, *Neocoptera*. During the month, 101 samples of Mollusca and freshwater Crabs have been identified by Sri. Sameer Kumar Pathy, WRC, ZSI, Pune. Four specimens of Platygastriidae (Hymenoptera) have been received as donation from Dr.

Veenakumari, NBAIL, Bangalore. During the month, two local surveys have been conducted to Chelavoor, Calicut on 23 August 2013 for insect collection and another survey to Beypore beach, Calicut on 05 August 2013 to photograph the rare Red-billed Tropicbird, stranded at the beach. Four identification and advisory services have been rendered to the students and other researchers related to identification of reptiles and other insects. Dr. K. Rajmohana, Scientist-C, has been selected as a member of the Editorial board of *Halteres*, an International Open Access journal in Entomology. Dr. Md. Jafer Palot, Asstt. Zool., has attended a one-day workshop on "Forensic Lab for Wildlife Studies" at Sulthan Bathery, Wayanad WLS on

20 August, 2013 being organized by the Kerala Forests & Wildlife Department. He also delivered a lecture on 'Biodiversity of Kerala' at the inaugural function of Biodiversity club at MES Ponnani College, Malappuram district, Kerala on 27 August, 2013. During the month 905 visitors paid their visits to the museum.

Publications

- Sidhu, A.K., Chandra, K., and Palot, M.J. (2013) Observations on the Status and diversity of butterflies in the fragile

ecosystem of Ladakh (J&K). *Rec. zool. Surv. India* (part-3): 101-112.

- Praveen, J., Dipu, K., Prince, M., Palot, M.J. and Dalvi, S. (2013) Identification of South Polar Skua, *Catharacta maccormicki* in the Arabian Sea and Indian Ocean. *BirdingASIA* 19: 83-88.
- Palot, M.J. (2013) Uragangal. Shanguvarayan. (Reptiles: Snakes of Kerala: Krait). *Koodu- An environmental Magazine in Malayalam*. Vol(4):41



Slender Coral Snake, *Calliophis melanurus*



A Red-billed Tropicbird, *Phaethon aethereus* stranded at Calicut coast.



Minervarya sahyadris, a rare and endangered frog of Western Ghats



Alareka keralensis (Hymenoptera: Diapriidae)



Lestes praemorsus (Insecta : Odonata)

Estuarine Biology Regional Centre, Gopalpur-on-Sea

During the month, one local survey has been conducted to Bahuda estuary, Ganjam District to study the crustacean fauna viz. Isopod and Amphipod. Nearly, 45 samples of Amphipoda and Isopods have been collected during the survey of Bahuda estuary for further taxonomic studies. Apart from these, a total of 13 examples of crabs have been collected; all these examples belong to 3 species of crabs under 3 genera and 3 families. One species of aquatic hemiptera has been identified from the collection made at Narmada and Tapi estuaries, Gujarat. Five species of Bivalve Mollusca belonging to 2 genera and one family have been identified from 53 examples of Malacofauna collected

from Pennera Estuary, Nellore, AP. Eleven of mollusca collected from Baitarani estuary, Bhadrak district have been identified under 7 species belonging to 7 genus and 7 families. A quiz competition has been organized at the Centre among the Students of P.M. High School, Gopalpur on the eve of Independence Day. During the month, 20 specimens have been digitized. During the month, around 60 visitors paid their visits to our museum. Dr Swetapadma Dash, Scientist-C & Officer-in-Charge has reviewed one manuscript on Heteroptera referred by *African Journal of Agricultural Research*.



Laternula truncata (Reeve)



Indoplanorbis exustus (Deshayes)

Sunderbans Regional Centre, Canning

During the month, 14 exs. of Orthoptera, belonging to 3 species under 2 families have been identified by Dr. D. Suresh Chand, Scientist-C and 7 exs. of Odonata belonging to 2

species from 2 genera under 1 family have been identified by Smt. S. Nandy, Scientist-B. More than 50 School students along with their teachers visited the museum.

Northern Regional Centre, Dehradun

During the month, 12 species of Dermaptera, and 7 species of nematodes collected from Dehradun have been identified; besides, 2 species of Amphibia and 11 species of nematodes collected from Punjab have also been identified. Scientists of the Centre also identified 10 species of nematodes collected from Sultanpur National Park, Haryana and 7 species of nematodes collected from Govind WLS (Uttarakhand) and 8 species of Hymenoptera from West Bengal.

DNA have been extracted from six species of Lepidoptera (*Lycaeninae*-4 and *Nymphalidae*- 2), three species of Lesser Cats (*Felidae*) and 5 species of Squirrels (*Sciuridae*). The SEM analysis of PGH of three species of Lesser Cats *Felis sylvestris*, *Felis caracal* and *Pardofelis temminckii* have also been completed. Permanent wax slides of 150 examples of nematodes have been prepared from soil samples collected from Punjab, Sultanpur NP, Dehradun, and Govind WLS for morphological studies.

A systematic list of 138 species of birds belonging to 94 genera and 43 families of Punjab has been finalized. During the month, we have registered 10 examples of Amphibia, 10 Reptilia, 15 Acridoidea, 8 Hymenoptera and 60 soil nematodes. Database entries pertained to 39 examples of nematodes and 62 examples of Lepidoptera have been entered in the invertebrate database. We have digitized 36 specimens of Amphibia and also entered the respective metadata.

Dr. P.C. Tak, Scientist-D and Officer-in-Charge has attended an inaugural function of the seminar on "Prospective Research Areas in Plant Taxonomy and Ethnobiology in the next ten years" held at BSI, NRC, Dehradun. Dr. Archana Bahuguna, Scientist-C attended meeting for Peoples Biodiversity Register (PBR) at Uttarakhand Biodiversity Board, Dehradun. She also has reviewed a paper on trichotaxonomy for the departmental journal. Around 30 local students have visited our museum.

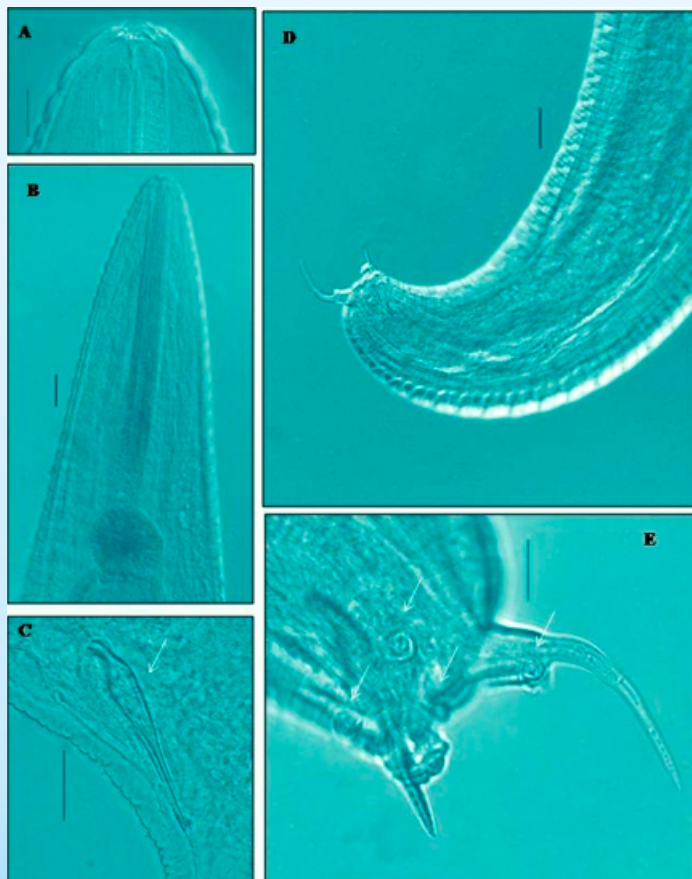
Publications

- Kazmi, S. I., and Kumar, P.G. (2013) The species of *Elasmus* Westwood (Hymenoptera: Eulophidae: Eulophinae) from West Bengal, India. *PROMMALIA*, 1: 79-92.
- Rizvi A. N., and Bursey, C.R. (2013). A new species of *Parapharyngodon* (Nematoda: Pharyngodonidae) from the yellow-bellied house gecko, *Hemidactylus flaviviridis* (Squamata: Gekkonidae), from Dehradun (Uttarakhand), India. *Comparative Parasitology (USA)* 80(2): 251-258. doi: <http://dx.doi.org/10.1654/4628.1>

Photomicrographs of male *Parapharyngodon jairajpurii* Rizvi & Bursey, 2013

A. Head B. Anterior end C. Spicule D. Posterior end
E. Caudal papillae

Scale bar: A, C, E = 20 µm; B, D = 50 µm



Marine Aquarium & Regional Centre, Digha

During the month, around 28 examples of live marine ornamental exhibits have been collected for exhibition in aquarium galleries. Our aquarium has received tourist at an average of 490 tourists per day. During the month, a total of 155 specimens have been identified including 40 species of fishes (64 specimens) and 36 species of mollusks (71 specimens) and 2 species of foraminifera (20 specimens). The identified specimens include *Bathymyrus echinorhynchus* Alcock, 1889, *Callionymus belcheri* Richardson, 1844, *C. filamentosus* Valenciennes, 1837, *C. japonicus* Houttuyn, 1782, and *Tetrasona gibbosus*

(Linnaeus, 1758) which are new to the West Bengal coast. Dr. Anil Mohapatra, Scientist-C and Officer-in-Charge has attended a Ph.D Viva-voce of one Mr. Khirud Chandra Patra at Jyoti Vihar, Sambalpur University, Sambalpur, Odisha as an external examiner on 10 August, 2013.

Publication

- Ray, D., Yennawar, P., Ghorai, N., and Mohapatra, A. (2012) Addition of three Angelfish (Family: Pomacanthidae) to the Ichthyofauna of West Bengal. *J. Bombay. Nat. Hist. Soc.*, 109(3):209-212.



Tetrasona gibbosus



Neenchelys buitendijki



Callionymus japonicus



Callionymus filamentosus



Callionymus belcheri



Bathymyrus echinorhynchus

Central Zone Regional Centre, Jabalpur

During the month, 5 species of butterflies (Lepidoptera), 5 species spiders (Archnida) and two species of Mammalia have been identified and registered. All these specimens were collected from Nauradehi Wildlife Sanctuary. Identification and advisory services have been rendered to Dr. S. D. Upadhyaya, Professor, Jawaharlal Nehru Agriculture University, Jabalpur for identification of Lepidoptera specimens (moths) collected from the proposed site of Atomic Power Plant at Chutka, Mandla district, Madhya Pradesh. The collected specimens belong to 11 species under 11 genera. Also our scientist have identified the bones of a mammal collected from underneath the nests of Long-billed Vulture at Adarwadi in Tamhini Ghat, Tal Mulshi, district Pune. One Dr. Anand Padhye, Associate Professor, Abasaheb, Garware College, Pune, has collected these bones and sought our help in identifying the bones. Accordingly the

identification report is been forwarded to the respective persons. Around 150 students of Ryan International School, Jabalpur visited our Centre on 16 August 2013 briefed about our various ongoing activities of our Centre.

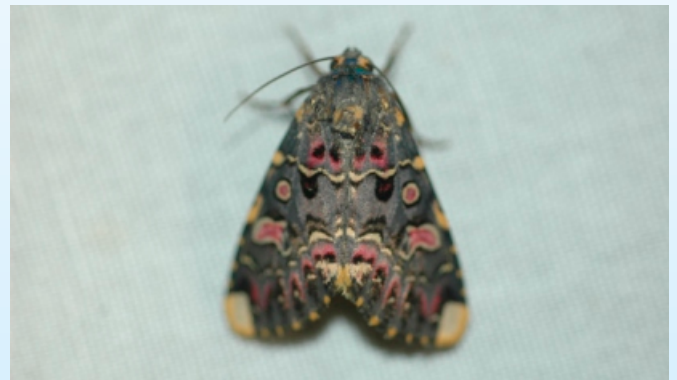
Publications

- Chandra, K., and Gupta, D. (2013) Studies on Tribe Gymnopleurini (Coleoptera: Scarabaeidae: Scarabaeinae) from Madhya Pradesh and Chhattisgarh with A Checklist from India. (<http://link.springer.com/article/10.1007%2Fs40011-013-0229-z>).
- Chandra, K., and Gupta, D. (2013) Scarab beetles (Coleoptera: Scarabaeoidea) of Barnawapara Wildlife Sanctuary, Chhattisgarh, India. *Journal of Threatened Taxa* 5(12): 4660-4671.
- Sambath, S., and Chandra, K. (2013) Moth Diversity of Chhattisgarh State, India. *The Indian Forester* 139(7): 626-632.

Some Moths of Ralamandal Wildlife Sanctuary, Indore, Madhya Pradesh



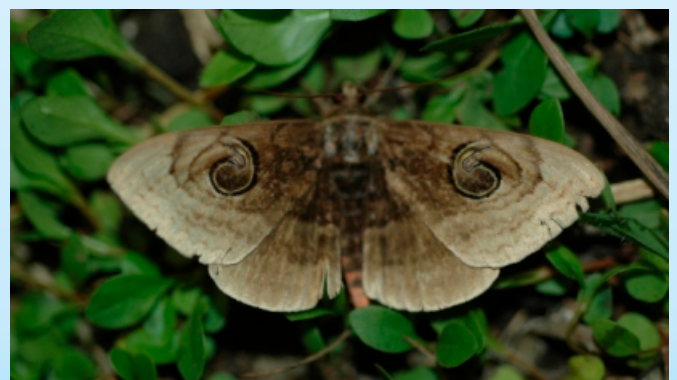
Callyna costiplaga Moore (Noctuidae)



Polytela gloriosae Fabricius (Noctuidae)



Digama insulana Felder (Erebidae)



Spirama retorta Clerck (Erebidae)



Agnosia microta (Hampson) (Sphingidae)



Maruba indicus (Walker) (Sphingidae)



Buzura suppressaria (Guenée) (Geometridae)



Dichocrosis festivalis Swinhoe (Crambidae)



Miresa albipuncta Herrich.- Schaffer (Notodontidae)



Actias selene (Hubner) (Saturniidae)

Freshwater Biology Regional Centre, Hyderabad

As part of the surveys of wetlands of Andhra Pradesh, during the month, a local survey has been conducted to Raigir tank and Bibinagar lake, Nalgonda Dist. and collected 112 examples pertaining to fishes, mollusks and insects for further taxonomic studies.

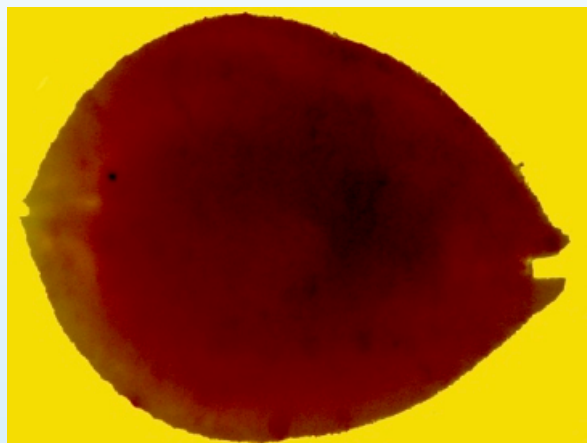
Scientists of the Centre have examined 23 examples of fish specimens from the earlier collections made at Krishnaraja Sagar Reservoir, Karnataka and identified as 6 species

under 4 genera belonging to 2 families viz. *Salmophasia novacula*, *Puntius conchoni*, *Puntius sophore*, *Puntius dorsalis*, *Amblypharyngodon mola* and *Parambassis thomassi*. Also examined some samples collected from the wetlands of Andhra Pradesh and identified them as 8 species of mollusks viz. *Lamellidens corrianus*, *Perreysia pachysoma*, *Perreysia favidens*, *Perreysia corrugate*, *Perreysia shurtleffana*, *Perreysia bonneaudi*, *Perreysia*

caerulea, *Sphaerium indicum*; 3 species of aquatic insects viz. *Cybister tripunctatus*, *Laccotrephus ruber* and *Lethocerus indicus*; similarly, from the plankton samples 3 species of cladocera such as *Diaphanosoma excism*, *Ceriodaphnia cornuta*, and *Alona rectangulara rectangular*; 2 species of Ostracodas, *Cypris subglobosa* and *Candonopsis putealis*; 2 species of rotifers, *Keratella cochlearis* and *Keratella tropica*.

As part of the ongoing digitization process of the freshwater fauna, 86 specimens have been digitized pertaining to 14 species of fishes, 6 species of molluscs, 3 species of reptiles, 2 species of amphibians and 1 species of mammal (Rodent) and 2 species of ostracods.

Dr. D. V. Rao, Scientist-C and Officer-in-Charge has attended a two-day state level capacity building workshop on "Economic Evaluation of Bio-resources for Access and Benefit Sharing ABS)" being organized by A.P. State Biodiversity Board, Hyderabad on 22 & 23 August, 2013.



Ostracod-*Cypris subglobosa* Sowerby

Publications

- Ray, D., Yennawar, P., Ghorai, N., and Mohapatra, A. (2012) Addition of three Angelfishes (Family: Pomacanthidae) to the Ichthyofauna of West Bengal. *J. Bombay Nat. Hist. Soc.*, 109(3): 209-212.
- Rao, D.V, and Rath, S. (2013) Ichthyofauna and Decapod Crustacean Fauna of Nuanai Estuary, Odisha. *Estuarine Ecosystem Series*, 8:1-64. (Zoological Survey of India, Kolkata).



Raigiri lake, Nalgonda, Andhra Pradesh



Ostracod-*Candonopsis putealis* Klie

Arunachal Pradesh Regional Centre, Itanagar

During the month, 156 registered fish specimens have been photographed for digitization and permanent and modified labeling done. Some of the interesting fishes photographed include *Amblyceps apangi* (Nath & Dey, 1989), *Chaca chaca* (Hamilton, 1822), *Erethistoides senkhiensis* (Tamang et al, 2008),

Exostoma labiatum (McClelland, 1842), *Oreichthys cosuatis* (Hamilton, 1822), *Parambassis ranga* (Hamilton, 1822), *Rasbora daniconius* (Hamilton, 1822), *Tetraodon cutcutia* (Hamilton, 1822). Around 22 school students from Itanagar visited the Centre.



Tetraodon cutcutia



Rasbora daniconius



Parambassis ranga



Oreichthys cosuatis



Exostoma labiatum



Erethistoides senkhiensis



Chaca chaca



Amblyceps apangi

Desert Regional Centre, Jodhpur

During the month, our scientists have identified and registered 3 species of ants and 5 species of fish from Rajasthan and Gujarat and also 3 species of ants from A & N Islands. We have digitized 20 specimens from NZC for Research Framework Document. Dr. Sanjeev Kumar, Scientist-C & Officer-in-charge has carried out a faunistic survey of Kachchh Biosphere Reserve (KBR), Gujarat from 18-29 August, 2013. Around 24 locations within KBR spread across the districts of Kachchh, Rajkot, Surendranagar, Patan, and Banaskantha have been surveyed for vertebrate fauna. A total of 5 species of amphibians, 21 species of reptiles, 144 species of birds and 24 species of mammals have been identified/recorded from the Kachchh Biosphere Reserve. A three-member team under the leadership of Mrs. Neena Tak, Assistant Zoologist has participated and displayed a stall at “*Bharat Nirman Jan Suchna Abhiyan*” being organized by Press Information Bureau (Ministry of Information and Broadcasting) Jodhpur held at Marwar Junction, Pali, Rajasthan from 17-19 August, 2013. Wherein our staff have displayed museum specimens and books related Rajasthan. Also, Dr. H. S. Banyal, Scientist-C

has participated and displayed fauna of the jurisdiction area in an exhibition organized by Rajasthan State Forest Department on 18 August, 2013 at Vankhand, Sursagar, Jodhpur to mark the occasion of State *Van Mahotsav*. Drs. Sanjeev Kumar, Scientist-C and Officer-in-Charge and H. S. Banyal, Scientist-C have attended a meeting on 16 August, 2013 as members of the MACP Screening Committee constituted by the Indian Institute of Handloom Technology (IIHT), Ministry of Textiles, Jodhpur. Dr. H. S. Banyal, Scientist-C has briefed the M.Sc. students of School of Planning and Architecture, New Delhi about the fauna displayed in the centre's museum and Centre's activities on 27 August, 2013. Besides, Dr. H. S. Banyal, and Mrs. Neena Tak, Assistant Zoologist have also provided information on the fauna displayed in the museum to a group of 30 students from English Academy, Jodhpur on aforementioned date.

Publication

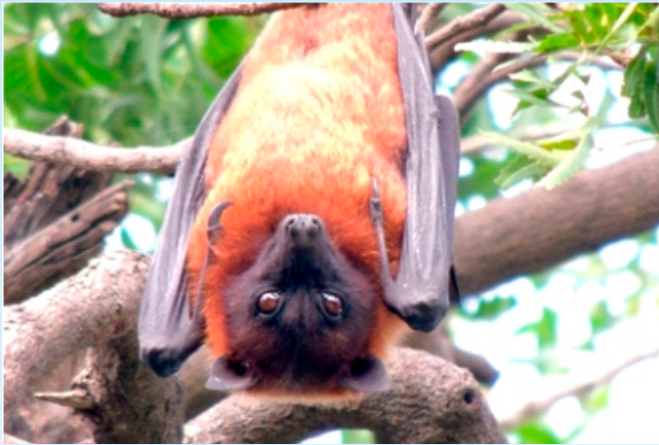
- Banyal, H. S., and Kumar, S. (2013) Fish diversity of seasonal wetlands of Kachchh Biosphere Reserve (KBR), beyond India Bridge, Gujarat. *J. Env. Bio-Sci.*, 27(1):129-130.



Egretta gularis (Bosc, 1792)



Numenius phaeopus (Linnaeus, 1758)



Pteropus giganteus (Brunnich, 1782)



Equus hemionus khur (Boddaert, 1785)



Mrs. Neena Tak, Assistant Zoologist and her team participated in *Bharat Nirman Jan Suchna Abhiyan* at Pali Rajasthan.



Dr. H. S. Banyal, Scientist-C participated in an exhibition organized by Rajasthan SFD at Jodhpur on the occasion of *State Van Mahotsav*.

Marine Biology Regional Centre, Chennai

During the month, scientists of this Centre have identified 8 species of Nematodes, 9 species of Arthropoda, 31 species of Mollusca, 1 species of Echinodermata and 5 species of Pisces out of the materials collected from Palkbay and Gulf of Mannar Biosphere Reserve. Fifty-four species have been digitized and their metadata compiled. Drs. L. Bindu, Scientist-C and G. Sivaleela, Scientist-B have delivered lectures on Protozoa and Marine Sponges, respectively, to the Post Graduate students of Zoology department of Stella Maris College, Chennai during their visit to our Centre. Dr. C. Venkatraman, Scientist-C & Officer-in-Charge has attended a workshop on "Biodiversity Informatics and Ecological Sciences in India"

organised by French Institute, Pondicherry and attended an Institutional Animal Ethics Committee (IAEC) meeting at Sri. Ramachandra Medical University as External Scientist nominated by the Animal Welfare Division of MoEF, New Delhi. Drs. C. Venkatraman and Rajkumar Rajan, Scientist-C have supervised the research projects of SRF's of the Centre. During the month, around 1112 tourists visited our marine aquarium and museum.

Publication

- Sivaleela, G., and Venkataraman, K. (2012) Distribution of Marine Polychaetes of India. *Rec. Zool. Surv. India*.112(4):113-126.

*Stichopus hermanni**Holothuria spinifera**Holothuria pardalis**Acaudina molpadioides*

Gangetic Plains Regional Centre, Patna

During the month, the scientific staff of the Centre have identified 14 species of Mollusca (Class Gastropoda, Order Mesogastropoda) such as *Neritina violacea* 1ex., *Thiara lineate* 2exs, *Thiara scabra* 4exs, *Thiara riqueti* 1ex. *Thiara granifera* 9exs, *Melanoides tuberculatus* 8exs., *Brotia costula* 4exs, *Digoniostoma cerameopoma* 2exs, *Digoniostoma pulchella* 3exs, *Gabbia orcula* 2exs, *Stenothyra deltae* 1ex, *Bellamya bengalensis* 8exs, *Idiopoma dissimilis* 2exs, *Pila globosa* 4exs. They also identified 12 species of family Noctuidae (Lepidoptera): *Cyana subornata* (Walker), *Cyana puella* Drury, *Lyclene obsoleta* (Moore), *Nishada flabrifera* Moore, *Lyclene dharma* (Moore), *Lymantria rhodina* Walker, *Anomis flava* Fabricius, *Blenina domans* Walker,

Hyela quadripartite Walker, *Syntomoides imaon* (Cramer), *Chalciope mygdon* (Cramer) and *Eproctis scintillans* Walker.

Dr. Gopal Sharma, Scientist-C and Officer-in-Charge has delivered a lecture on the Conservation of Natural Resources in Notredame Academy, Patna on 6 August, 2013. On 23 August 2013, Dr. Sharma has been felicitated by the Hon'ble Chief Minister of Bihar, Mr. Nitish Kumar for his conservation efforts involving rescue and release of two live stranded dolphins in Bihar. Dr. Sharma, has made contribution in terms of editing and finalizing a book titled 'Birds of Bihar' published by the Department of Forests, Govt. of Bihar.

Western Regional Centre, Pune

During the month, one species of Collembola, one species of Coccinellidae, 08 species of Hymenoptera, and 12 species of Pisces have been identified. Identification and advisory services have been rendered to the Range Forest Officer, Nasik (Territorial), Maharashtra by means of identifying 11 live specimens of Reptiles. Upon request, 7 specimens of freshwater crabs and 94 specimens of mollusca have been identified for WGRC, ZSI, Kozhikode.

Publication

- Jadhav, S.S., Wagh, P., Kurhade, S., and Mahabal, A. (2013) A case of unusual colour morph in spotted snakehead *Channa punctata* (Bloch, 1793) in Nandur-Madhmeshwar Wetland, Maharashtra, India. *MIN Newsletter for freshwater fish, specialised group and Freshwater fish Conservation Network of South Asia (FFCNSA)*, pp.21-25.



Naja naja (Linnaeus)



Daboia russelii (Shaw & Nodder)



Bungarus caeruleus
(Schneider)



Cyrestis thyodamas indica Evans, 1924 Indian Map
Butterfly



Alien Apple Snail *Pomacea diffusa* Blume, 1957 from
Pune

North Eastern Regional Centre, Shillong

During the month, one local survey has been conducted to Mawlyngot area in connection with the project “Mass migration of earthworms in Mawlyngot area, East Khasi Hills district, Meghalaya”. Scientific staff of the Centre have identified 197 examples of specimens belonging to pisces and also digitized the Holotype and Paratypes of *Badis triocellus*. Seventy specimens of aquatic Hemiptera, 17 Amphibia and 111 Annelida collected from previous surveys have been identified and registered. Among these, two species of Amphibia have been newly recorded from the states of Meghalaya and Manipur and the findings will be published in due course of time. Dr. S.R. Hajong, Assistant Professor, Department of Zoology, North Eastern Hill University, Shillong visited the Centre and deposited a Holotype and the Paratypes of

Chremistica ribhoi sp.nov. (Insecta: Cicadidae) and registration numbers for the same have been provided. Dr. S. Roychoudhary, Asstt. Professor, Department of Life Sciences, Assam University, Silchar along with a group of 29 students visited the Centre on 26 August, 2013 and appreciated the Centre's collection and its upkeep. A group of school children from S. Fernando Memorial School and H. Elias Higher Secondary School, Shillong also visited the Centre.

Publication

- Saikia, B., and Sen, N. (2012) Additional information on *Xenophrys zunhebotoensis* Mathew and Sen, 2007 (Amphibia: Anura: Meghphryidae) and range extension in Meghalaya, India. *Rec. Zool. Surv. India* 112(3):123-124.



Teachers and students from Department of Life Sciences, Assam University, Silchar visiting the Centre.



High Altitude Regional Centre, Solan

A field survey has been conducted in the Cold Desert of Spiti Valley, Lahaul Spiti (Himachal Pradesh) from 23 August, 2013 to 07 September, 2013 and various faunal samples belonging to 13 animal groups (1537exs) have been collected from different altitudes and habitats of the fragile Himalayan Ecosystem. Two local surveys have also been undertaken to Chail

Wildlife Sanctuary, Solan on 27 August 2013 and on 29 August 2013 and 167 and 78 examples have been collected, respectively. Faunistic identification from the Centre includes 02 species of butterflies (out of 10 examples), 02 species of Orthoptera (out of 7 examples) and 02 species of earthworms (out of 23 examples) from Cold Desert Spiti Valley, district Lahaul &

Spiti (HP); 02 species of Pisces (out of 03 examples) and 01 species of Amphibia (out of 02 examples) from Chail WLS, distict Solan. On 17 August 2013, one Miss. Saveena has joined the Centre as Junior Research Fellow (JRF).



Top of Kunjam pass at an altitude of 4900 masl

Rocks porification
by high wind
velocity in Spiti
Vally Cold Desert



Sphingonotus longipennis Saussure



Glacier and alpine in Spiti Valley



Collection at Chandertal Lake Spiti Velley



Polyommatus icarus in Spiti



Black-headed Jay *Garrulus lanceolatus*

Southern Regional Centre, Chennai

A faunal survey led by Dr. Jayasree Thilak, Scientist-C has been carried out to Trichy and Villupuram districts of Tamil Nadu from 16-27 August, 2013 (12 days) and collected 853 examples belonging to different faunal groups and the team has collected 86 sample lots of zooplanktons. Dr. R. Babu, Scientist-C has identified and registered 28 specimens of Odonates belonging to 7 species under 2 families from Thiruvannamalai and Nilgiri districts of Tamil Nadu. Dr. R. Venkitesan, Scientist-C has identified 149 specimens of Molluscs belonging to 4 family 11 genera and 21 species from the collections of Southern Western Ghats of Tamil Nadu. Dr. R. Aengals, Scientist-C, identified 7 specimens of reptiles as 3 species under 3 genera of 1 family collected from the Kalakad-Mundanthurai Tiger Reserve. He also rendered identification and advisory services to a researcher from the Department of Zoology, Annamalai University,

Chidambaram by identifying two Asian common toads. Dr. S. Prabakaran, Scientist-C has rendered identification services on Membracid's specimen received from Indian Institute of Science Education and Research, Thiruvananthapuram. Dr V. M. Sathish Kumar, Sr. Zoological Assistant has initiated a 15-days survey tour to the Gulf of Mannar to study Sea Cucumbers. Dr K. Ilango, Scientist-D and Officer-in-Charge has attended a workshop on 'Biodiversity Informatics and Ecological Sciences' organized by the French Institute of India, Pondichery on 06 August, 2013 and the Executive Committee meeting on 'Pallikarnai Marshland Protection Commission on 29 August, 2013.

Publication

- Tripathy, B., Mukhopadhyay, A., Hafiz, M., and Venkitesan, R. (2013) Cephalopoda in NZC of Zoological Survey of India . Kolkata, Occasional Paper No.362.1-60.



◀ Fig. 1



▼ Fig. 2

Scientists of the Centre conducted a faunistic surveys in the Western Ghats of Taminadu portion and recorded various faunal groups of which the Figure 1 is of a damselfly *Copers marginipes* and Figure 2 of a pair of Nilgiri Tahr *Nilgiritragus hylocrius*.

ANIMAL OF THE MONTH

***Botia striata* Rao, 1920**

Text and photograph by Shrikant Jadhav,
Zoological Survey of India, Western Regional Centre, Pune

peaceful thus is well known for community or aquarium fish.

The body of this fish is short, moderately deep and has a round abdomen. Four pairs of barbels protruding from mental lobe. Snout of this fish is not very long but its length is either equal to or less than post-orbital distance. Eyes situated in posterior half of head. A bifid erectile suborbital spine present in front of each eye. Dorsal fin inserted nearer to caudal fin base with 10 to 12 rays, whereas the anal fin is short with seven or eight rays. Caudal fin deeply forked. It attains a maximum length of 9.5 cm.

B. striata is endemic to Western Ghats of India. It has been recorded from Tunga and Bhadra rivers of Karnataka and Koyna, Panchganga rivers of Maharashtra. According to IUCN, it is categorised as 'Endangered', because the species is a habitat specialist and occurs only in a small range. The habitat of the species is severely threatened because of deforestation, siltation, recreational activities on the mountain tops and pollution of the hill streams.

Botia striata is commonly known as Zebra fish or Tiger Loach. The entire body and fins of this loach is barred with alternating stripes of both tan and dark brown, which give this fish a very interesting look. Sometimes it is referred as scaleless fish, but infact it has small scales that are embedded in the skin. It is an active scavenger and an aggressive one enjoys the company of fellow *striata* or other species. It is a bottom-dweller and prefer caves, holes and other places to hide. Also it is shy,

OUT OF THE BOX

Olinguito the newest rare mammal species discovery

<http://edition.cnn.com/2013/08/15/world/americas/new-mammal-smithsonian>

New fish species found in Arunachal Pradesh

<http://timesofindia.indiatimes.com/home/environment/developmental-issues/New-fish-species-found-in-Arunachal-Pradesh/articleshow/22062706.cms>

Rare butterfly sub-species discovered in Arunachal sanctuary

<http://timesofindia.indiatimes.com/home/environment/flora-fauna/Rare-butterfly-sub-species-discovered-in-Arunachal-sanctuary/articleshow/22481427.cms>

Apes plan, communicate their trips in advance

<http://timesofindia.indiatimes.com/home/science/Apes-plan-communicate-their-trips-in-advance/articleshow/22499762.cms>

'Shy' male birds flock together--and have fewer friends

<http://phys.org/news/2013-09-shy-male-birds-flock-togetherand.html#jCp>