

ZSI e-NEWS

The Monthly Electronic Newsletter of Zoological Survey of India



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ANIMAL OF THE MONTH



The common
Indian stick insect

Check-list of fauna of India:

1. Simuliidae (Diptera: Insecta)
 2. Neuropterids (Insecta)
 3. Amphibia (updated till July 2010)
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ANIMAL CALLS



Amboli
Bush Frog

VIDEO



Monopterus
digressus

OUT OF THE BOX



ZSI IN NEWS

PICTURE GALLERY



POSTER SERIES



PAINTINGS FROM ZSI HERITAGE ALBUM



Headquarters, Kolkata

Extensive field surveys were undertaken in West Bengal and Eastern Ghats of Orissa (Koraput & Rayagada districts) and local surveys were carried out in and around the wetland areas (Bortibeel) of North 24 Parganas, West Bengal.

During the month, *Megastigmus sonneratae* Narendran & Girish Kumar (Hymenoptera: Torymidae) was described as new to science. Out of the material studied, one species of the genus *Copidosoma* Ratzeburg (Hymenoptera: Encyrtidae) from Rajasthan and Uttar Pradesh also turned out to be new to science.

The discovery of following eleven species of Hornet wasps (Hymenoptera : Vespidae) of the genus *Vespa* were found to be new records for various States of India: *V. affinis* (Linnaeus) from Arunachal Pradesh, Meghalaya, Nagaland and Tripura; *V. analis* Fabricius from Arunachal Pradesh; *V. auraria* Smith from Jharkhand, Himachal Pradesh, Madhya Pradesh, Mizoram, Nagaland, Tripura and Uttar Pradesh; *V. basalis* Smith from Mizoram, Orissa and Uttar Pradesh; *V. bicolor* Fabricius from Manipur; *V. binghami* du Buysson from Sikkim; *V. mandarinia* Smith from Manipur and Mizoram; *V. orientalis* Linnaeus from Jharkhand and Orissa; *V. soror* du Buysson from Meghalaya; *V. tropica* (Linnaeus) from Manipur, Mizoram, Nagaland, Orissa and *V. velutina* Lepeletier from Arunachal Pradesh. A Flying fish, *Perexocoetus mento* (Valenciennes) (Pisces: Exocoetidae) and a species of the genus *Rhytidothorax* Ashmead (Hymenoptera: Encyrtidae) also turned out to be new records to Orissa and Namdapha Tiger Reserve (Arunachal Pradesh), respectively.

During the month, the scientists of Headquarters identified 3 species of parasitic nematodes, 4 species of Collembola, 6 species of

Hemiptera, 10 species of Hymenoptera, 5 species of Isoptera, 6 species of Lepidoptera, 9 species of Odonata, 6 species of Orthoptera, 15 species of spiders, 12 species of mollusks and 7 species of anurans from the States of Himachal Pradesh, Jharkhand, Kerala, Karnataka, Rajasthan, Uttarakhand, Uttar Pradesh, West Bengal, Tamil Nadu, Namdapha Tiger Reserve (Arunachal Pradesh) and Melghat Tiger Reserve, Maharashtra.

Identification services were rendered on ten lots of specimens, received from different organizations. Confiscated broken bony shells of the semi aquatic turtle *Melanochelys trijuga* (Schweigger), received from the Deputy Conservator of Forests, North Goa Division, were identified and the report submitted.

Six research papers were published, seven accepted for publication and four communicated.

A scientist of Headquarters trained 11 students of Vivekananda College, Kolkata on collection, preservation, identification and field habitats of spiders.

Dr. A.K. Sarkar, retired professor from Vivekananda College, Kolkata, Dr. Shankar Murthy, Research Associate, University of Agricultural Sciences, G.K.V.K., Bangalore and research scholars from University of Agricultural Sciences, G.K.V.K., Bangalore, Ranchi University, Jharkhand, University of Calcutta, Kolkata, Barasat University, Barasat and Vidyasagar College, Kolkata visited different sections of Headquarters to study the collections.

During the month, a few staff members of the Headquarters were deputed to attend the following seminars/ refresher courses/ training courses:

- Seminar on “E-resources & Discovery Solutions” organized by Informatics (India), held at Kolkata on 4th August.
- “Fifty first Personal Assistants (Refresher)



Megastigmus sonneratae sp. nov.

Course” from 9th to 20th August held at Institute of Secretariat Training and Management, Dept. of Personnel and Training, New Delhi.

- “Management training” at Institute of Secretariat Training and Management, Dept. of Personnel and Training, New Delhi, on 16th and 17th August, 2010.
- Three months Training Course on “Hindi Translation” at Central Translation Bureau, Dept. of Official Language, Ministry of Home Affairs, Kolkata.
- “Eighth Advanced Computer Applications for Administrative Personnel of S&T Departments, Govt. of India” at Indian Institute of Public Administration, New Delhi from 23rd to 29th August, 2010.
- “All India Rajbhasha Sammelan- Special Hindi Training Programme” organized by The Centre for Training and Development, Bangalore, held at Tirupati on 30th & 31st August, 2010.


Publications:

1. Chitra, J. and Ramanibai, R. 2010. Diversity of microzooplankton (Tintinnida) in Muttukadu Backwaters, South East Coast of India. *J. Environ. Sociobiol.*, 7 (1): 45-52.
2. Girish Kumar, P. and Srinivasan, G. 2010. Taxonomic studies of Hornet wasps (Hymenoptera: Vespidae) *Vespa* Linnaeus of India. *Rec. zool. Surv. India*, 110 (2): 57-80.

3. Mishra, S.S. and Barman, R.P. 2010. On the identity of two *Polynemus* sp. (Pisces: Perciformes: Polynemidae) reported from India. *Rec. zool. surv. India*, 110 (2): 35-38.
4. Mishra, S.S., Rath, S. and Dash, S. 2010. On the occurrence of a flying fish *Perexocoetus mento* (Velenciennes) from Orissa coast. *Rec. zool. surv. India*, 110 (2): 135-136.
5. Mitra, T.R. and Babu, R. 2010. Revision of Indian species of the Families

Platycnemididae and Coenagrionidae (Insecta: Odonata: Zygoptera) (Taxonomy and Zoogeography). *Rec. zool. Surv. India, Occ. Pap. No. 315*: 1-103.

6. Narendran, T.C., Girish Kumar, P. and Vastrad, A.S. 2010. Two new species of *Megastigmus* Dalman (Hymenoptera: Torymidae) from India with a revised key to Indian species. *Rec. zool. Surv. India*, 110 (2): 1-6.

 In this Issue

Desert Regional Centre, Jodhpur

Scientists of the Centre identified 8 species of Nematoda, 6 species of Lepidoptera and 10 species of Coleoptera from various environs of Rajasthan. 4 papers were published. Identification and advisory services were provided to Ph.D. students of Govt. College, Kota on Lepidoptera and Odonata. 63 entries of identified fauna were made in the faunal Database of the Centre. 38 entries pertaining to the books in the Centre's library was made employing the software, *e-granthalaya*. The quarterly Hindi Workshop was organized on 17th August. 321 School Children of the Central Academy School (Shastri Circle & Ratanada branch) visited the Museum and lectures were delivered to them on various topics such as Wildlife, Environmental Awareness and Conservation on 12th and 19th August. A five member's team participated in "Bharat Nirman Jan Suchana Abhiyan" organized by Press Information Bureau (Ministry of Information & Broadcasting, Govt. of India), Jodhpur at Chohtan, District-Barmer, Rajasthan from 28th - 30th August and the Centre received the Certificate of appreciation and Trophy.

Publications:

1. Ramakrishna, Chandra, K., Bohra, P., Sharma, G. and Murleedharan, V. (Eds.) 2010. Golden Jubilee Souvenir of DRC, ZSI, Jodhpur. Published by Director, ZSI, Kolkata. Evergreen Printers, Jodhpur. 80pp. Printers, Jodhpur. 144pp.

2. Sharma, G. 2010. Studies on the reproductive behaviour of *Ischnura aurora* (Brauer) (Odonata: Insecta) around Dholbaha Dam (Punjab Shivalik), India. *Biological Forum- An International Journal*. 2(1): 6-8.
3. Sharma, G. and Joshi, P.C. 2010. Species composition of butterflies (Lepidoptera: Insecta) from Dholbaha dam in Punjab Shivaliks, India. *Journal of Environment and Bio-Sciences*. 24(1): 81-85.
4. Kumar, R., Ramamurthy, V.V. and Sharma, G. 2010. Checklist of insects associated with Jamun (*Syzygium cuminii* Skeels) from India. *Biological Forum- An International Journal*. 2(1): 1-5.



The Trophy and the Certificate of appreciation received by the Centre for participating in the 'Bharat Nirman Jan Suchana Abhiyan'

 In this Issue

Marine Aquarium cum Regional Centre, Digha

An average of 250 visitors per day visited the Centre and 107 specimens of ornamental marine fauna were liberated in the tanks for exhibition during this month. Attractions among the exhibits were, Tripple-tailed fish (*Labotes surinamensis*), different varieties of Batfishes (*Platax tiera*, *Platax* sp.), Goat fish (*Upeneus* sp.), Picnic Seabream (*Acanthopagurus berda*) and File fish (*Aluterus monocerus*). Apart from ornamental fauna, 46 examples were collected through local surveys around Digha coast under the Annual Plan of Research work

and 120 examples from the earlier collection digitized. Advisory services were rendered to a group of final year students of M.F.Sc. from Central Institute of Fisheries Education, Mumbai, during their study excursion and the final year students of Architecture from Bengal Engineering & Science University, Shibpur, for completion of their dissertation work on public aquarium. One research paper has been communicated for publication.



Acanthurus nigrofasciatus



Abudefduf bengalensis



Vagabond butterflyfish



Xanclus cornatus



Indian grouper



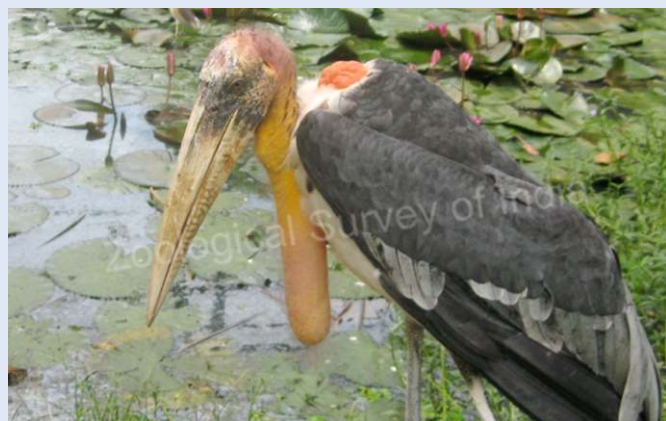
Sea snake

North Eastern Regional Centre, Shillong

During the month, 13 species of fishes, and 10 species of amphibians were identified and registered from the East Khasi Hills District, Meghalaya. Two scientists of the Centre attended a meeting and a workshop on “Development of North East Spatial Data Infrastructure (NESDI)” supported by the Department of science and Technology Govt. of India at North Eastern Council (NEC) Secretariat, Shillong on 3rd and 19th August, respectively. 2 staff of the Centre visited the Conservation areas of Assam to photograph certain interesting species of North East India.

The final report on “Faunal Inventory of Nokrek Biosphere Reserve, Meghalaya” and a research note on Amphibia were submitted for publication. 4 research papers were published.

Staff of the Centre attended the Hindi teaching course on Prabodh and Pravin, thrice a week.



Greater Adjutant Stork,
Leptoptilos dubius, an endangered bird

Publications:

1. Sharma, Sumita, 2010. Micro-faunal diversity of Cladocerans (Crustacea, Branchiopoda, Cladocera) in rice field ecosystems of Meghalaya. *Rec. zool. Surv. India* 110 (1): 35-45.
2. Sharma, B. K. and Sharma, Sumita, 2010. Faunal diversity of Cladocera (Crustacea: Branchiopoda) of Loktak Lake (a Ramsar site), Manipur (N. E. India). *J. Bombay Nat. Hist. Soc.* 106(2): 156-161.
3. Sharma, B. K. and Sharma, Sumita, 2010. Taxonomic notes on some interesting Cladocerans (Crustacea: Branchiopoda: Cladocera) from Assam (N. E. India). *Rec. zool. Surv. India* 110 (2): 39-47.
4. Sharma, B. K. and Sharma, Sumita, 2010. Notes on new records of monogonont rotifers (Rotifera: Eurotatoria) from floodplain lakes of Assam. *Rec. zool. Surv. India* 110 (2): 49-55.



Asian /Himalayan Black Bear *Ursus thibetanus*,
a vulnerable mammal

In this Issue

Estuarine Biology Regional Centre, Gopalpur-on-Sea

Four field surveys were conducted in the coastal areas of Ganjam district, Orissa to study the mosquito fauna and 5 species were identified from the collection. Out of the unidentified collection of crabs and prawns from three Estuaries of Orissa, namely Brahmani-Baitarani, Nunai and Budhabalanga, 19 species of crabs and 11 species of prawns were identified. Besides, 7 species of crabs and 8

species of prawns were also identified from the Cauvery estuarine complex, Tamil Nadu. One research paper was published during the month.

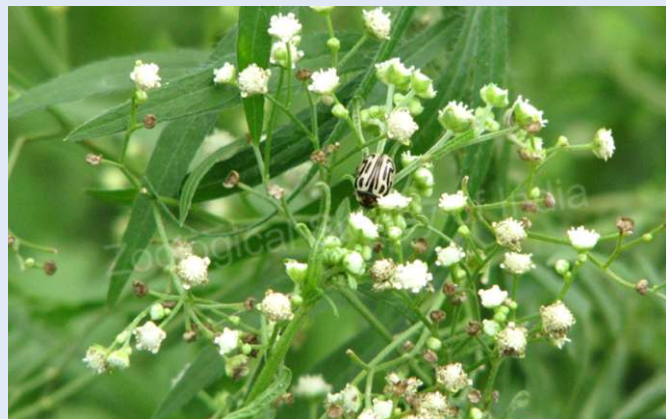
Publication:

Kosygin, L. and Dhamendra, H. 2010. Fish diversity and physico-chemical characteristics of the upstream of Imphal River, Manipur, India. *Environment & Ecology*, 28(2B): 1328-1332.

In this Issue

High Altitude Regional Centre, Solan

Three species of Lepidoptera and two species of Orthoptera from Kalatop-Khajjar Wildlife Sanctuary were identified. A scientist of the Centre reviewed a research proposal on Lepidoptera for MoEF, New Delhi. Corrected manuscripts of research papers on butterfly and Snow trout were submitted to the departmental




The Mexican beetle (*Zygogramma bicolorata*), used in bio-control of the Congress grass (*Parthenium hysterophorus*), in Himachal Pradesh

journal. Scientists from CCMB, Hyderabad were provided the facility for their work on molecular studies of birds deposited in the faunal holdings of the Centre. A query received from the Himachal Pradesh State Biodiversity Board on certain threatened species of birds and mammals was attended.



Prosotas nora at Churdhar Wildlife Sanctuary

 In this Issue

Freshwater Biology Regional Center, Hyderabad

Follow up laboratory identification and chemical analysis studies on 5 ongoing programmes were continued for drawing inventory of various major wetland faunae-zooplankton nekton predominantly fishes, aquatic entomofaunal groups -bugs (Hemiptera) and beetles (Coleoptera), etc by various group experts. Writing up of reports, in publishable format, for 2 programmes-Taxonomic and ecological studies on insect faunae of lakes of Hyderabad and Ecological studies on Kolleru Lake on post dismantling of illegal aquaculture ponds, Krishna-West Godavari districts, have been in progress.


One field visit to Palair dam, a raw water reservoir, Khammam district was undertaken from 13th -17th of the month for studies on southwest monsoon's impact on raw water reservoir and surface run offs/inflow into it. Samples of raw water, zooplankton, nekton, predominantly food fishes and other wetland faunae were collected and water samples analysed in field (camp laboratory) for various ambient physicochemical parameters and inorganic plant nutrients. The biological material collected has partly been sorted for taxonomic identification. Short term studies have also been initiated on a few temporary water habitats in and around Attapur, an undulating rocky terrain holding few natural depressions that get filled during rainy season. Temporary water zooplankton groups were sorted and identified besides undertaking the in situ estimation of basic physicochemical parameters and inorganic nutrients.

One major taxonomic advisory service was dispensed (Coleoptera: 41 spp.) from Madhya Pradesh/Chattisgarh and detailed taxonomic report in a publishable format submitted.




Photo: A.Anand Kumar

The spectacle cobra, *Naja naja*

 In this Issue

Sunderban Regional Centre, Canning

Field surveys were carried out in and around Canning, including the coast of Matla Estuary and 15 fishes, 10 gastropods and one reptile were collected for identification. Faunal identification undertaken during the month includes 4 species of Brachyuran crabs, 23

species of Fishes and 2 species of snakes. The holding of the Centre currently comprises of 7274 examples of identified fauna and 43007 examples of unidentified fauna. Three species of fishes collected from Matla Estuary are apparently new to Matla area.  In this Issue

Andaman and Nicobar Regional Centre, Port Blair

Marine and terrestrial surveys were conducted in Rutland Island during 19th to 20th August to study the corals and its associated faunal communities in the subtidal region, and invertebrate and vertebrate faunal components in terrestrial ecosystem. The coral monitoring studies conducted in Rutland Island indicated that 17.93% of corals recuperated out of the mass bleaching reported during May 2010. As a result of the survey, 91 species of corals, 43 species of molluscs, 19 species of echinoderms, 66 species of fishes, 7 species of nudibranchs, 1 species of polyclad, 6 species of crustaceans, 3 species of sponges, 8 species of gorgonians, 47 species of zooplankton and 36 species of phytoplankton were identified from the marine ecosystem of Rutland Island. Besides, 62 species of insects, 2 species of amphibians and 1 species of reptile were identified from terrestrial fauna. Among them, the nudibranchs *Chromodoris colemani* Rudman, 1982, *Discodoris boholiensis* Berg, 1877 and *Thorunna punicea* (Rudman, 1995) and a polyclad *Pseudoceros goslineri* Newmann & Cannon, 1994 were recorded for the first time from Indian waters. In addition, 48 species of fishes were identified from the unnamed collection of the Centre. Annual progress report for the project 'Diversity and Distribution of Corals and Coral associated faunal communities in Rani Jhansi Marine National Park' has been prepared and submitted to the administrative Ministry. A field guide to Echinoderms of Andaman and Nicobar Islands has been submitted for publication. A stranded marine mammal, the

common dolphin *Delphinus delphis*, and the confiscated skins of saltwater crocodile *Crocodylus porosus* were identified, based on the requests received from the Deputy Conservator of Forest (WL), Port Blair and the Assistant Wildlife Warden, Little Andaman, respectively. A Memorandum of Understanding between ZSI/ANRC, Port Blair and ICAR-CARI, Port Blair was signed on 3rd August for the collaborative study on 'Marine Sponges Barcoding'. A scientist of the Centre attended the Scientific Advisory Committee meeting and the meeting on the site selection for the proposed Oceanarium in A&N Islands (chaired by the Chief Secretary, A&N Administration) on 12th and 23rd August respectively and also delivered an invited lecture on Coral Reef Ecosystem at the National Conference on Biodiversity held at Madurai Kamaraj University during 25th to 27th August. Lectures on Human-animal conflict, and Faunal Diversity of A&N Islands were delivered by the scientific staff of the Centre for the benefit of the students of Forest Training School, Port Blair, on request. One of the scientists attended the training course on Knowledge Management at the Institute of Secretariat Training and Management, New Delhi from 16th to 17th August.

Publications:

1. Ramakrishna, C. Raghunathan and C. Sivapeurman, 2010. Biodiversity of Andaman & Nicobar Islands an overview. In: *Recent trends in Biodiversity of Andaman and Nicobar Islands*. Published by Zoological Survey of India, Kolkata, 1 - 42p.

2. Raghunathan, C., C. Sivaperuman, Ch. Satyanarayana and P.T. Rajan, 2010. Present scenario of corals in tsunami affected Katchal and Teressa Islands of Andaman and Nicobar Islands. *Nature Environment and Pollution Technology*, 9(2): 203-216.
3. Sivaperuman, C. and Sanjeev Kumar, 2010. Diversity of vertebrate fauna of Ranthombhore National Park, India. In: *Natinal Parks: Vegetation, Wildlife and Threats* (Eds.) Grazia Polisciano and Olmo Farina. Nova Publishers, New York, pp215-224.
4. Tamal Mondal, Chelladurai Raghunathan, Chandrasekaran Sivaperuman and Ramakrishna, 2010. Identification of seven scleractinian corals from Andaman and Nicobar Islands as new record to Indian water. *Proceedings of Zoological Society*, 63(1): 61-66.
5. Raghuraman, R., C. R. Sreeraj, Titus Immanuel and C. Raghunathan, 2010. Intensive study on the scleractinian coral diversity of Pongibalu, South Andaman. *Journal of Environment and Sociobiology*, 7(1): 29-36.

Stranded dolphin *Delphinus delphis*

Confiscated skins of saltwater crocodile

Coral, *Cycloseris patelliformis*Coral, *Halomitra pileus*Gastropod, *Cypraea (Monetaria) moneta*Gastropod, *Cypraea annulus*

Arunachal Pradesh Regional Centre, Itanagar

A field survey was conducted on 11th August, around Jote area of Itanagar and identified 18 species of Lepidoptera, 5 species of Orthoptera, 4 species of Coleoptera and 4 species of Odonata from the area. A staff of the Centre had undergone a training programme on 'Management and Leadership Development' from 16th - 20th August 2010 at Lal Bahadur Shastri National Academy of administration, Mussoorie. A manuscript titled *Oreichthyes*

bogiensis, a new Cyprinid species (Teleostei: Cyprinidae) from India has been submitted for publication. One research paper was published. Thirty two school and college students visited the library and museum during the month.

Publication:

Chand, D.S. & M.C. Muralirangan (2010) Yield loss in two rice cultivars by the small rice grasshopper, *Oxya nitidula* (Walker). *Journal of Environ. & Sociobiology* 7(1): 65-68.



Cruiser, *Vindula erota*



Fivebar Swordtail, *Graphium antiphates*



Punchinello, *Zemerus flegyas*



Mud Puddling by Butterflies

 In this Issue

Northern Regional Center, Dehra Dun

A field survey was conducted in the Dehradun district and representative fauna belonging to 11 faunal groups collected for taxonomic studies, besides observing 10 species of birds and 3 species of mammals. 17 species of butterflies, 5 species of nematodes, 7 species of centipedes and 2 species of reptiles were

identified from the Kalesar Wildlife Sanctuary. Chapters on mammals, Aves, reptiles, Lepidoptera, centipedes and nematodes for the faunal document on Kalesar Wildlife Sanctuary are under finalisation. 10 species of centipedes collected from Haryana have been identified and the manuscript finalised.

Three research papers were published. Two research papers on Aves were reviewed and offered suitable comments for the departmental journal. Identification and Advisory services were provided to the Dept of Zoology, S. K. University, Andhra Pradesh. A scientist of the Centre attended the *Trainers Training Program on SEM* at Singapore from 26th -28th July'10.

Publications:

1. Bahuguna, A. (2010). New distributional record of *Morenia petersi*, *Herpetological*

Review, 41 (2): 242

2. Bahuguna, A. (2010). Anatomy of primary guard hair of species of Viverridae (Mammalia: Carnivora) listed under Indian Wildlife Protection Act, 1972. *Annals of Forestry*, 18(1): 141-158
3. Rizvi, A. N. & Bhutia, P.T. (2010). First report on the nematode parasites of amphibians from Kalesar Wildlife Sanctuary, Haryana, India. *Annals of Forestry*, 18(1): 129-134

 In this Issue

Central Zone Regional Centre, Jabalpur

During the month, 6 species of Rotifera, 5 species of Cladocera and 1 species of Protozoa were identified from Veerangana Durgavati Wildlife Sanctuary. 2 species of Cladocera, 3 species of Rotifera and 1 species of Ostracoda were identified from Singhori Wildlife Sanctuary. A backlog collection of 13 species of Odonata and 7 species of aquatic Heteroptera were identified from the backlog collection from Madhya Pradesh & Chhattisgarh.

A Checklist of Indian Gall midges (Diptera: Cecidomyiidae) was finalized for submission. Photographs of 78 species of butterflies (Lepidoptera), received from Ehiraj College,

Tamil Nadu were identified and identification service rendered. Six B. Sc students from St. Aloysius College and six M. Sc. students from Govt. M. H. College of Home Science and Science, Jabalpur were permitted for the internship from ZSI during this month. Guidance was also provided to a batch of B. Sc. students from the St. Aloysius College, Jabalpur for their studies on the diversity of bats (Mammalia) in Jabalpur District. Taxonomic identification of dragonflies and damselflies were also taught to M. Sc students from Home Science College, Jabalpur. Two scientific papers were reviewed.

Moths recorded from Veerangana Durgavati Wildlife Sanctuary



Actias selene (Hubner)




Artena dotata Fabricius



Callyna costiplaga Moore



Acherontia lachesis (Fabricius)  In this Issue

Southern Regional Centre, Chennai

A new species of freshwater fish, *Puntius rohani* Rema Devi, Indra & Marcus Knight, in the *Puntius filamentosus* group was described from the southern Western Ghats of India. Fifteen species of various faunal groups were identified from the Kanniyakumari Wildlife Sanctuary. Besides, 6 species of reptiles were also identified from the Southern eastern Ghats of Tamil Nadu. Three research papers were published, two submitted and nine manuscripts reviewed. Two scientists attended a lecture on the Biodiversity Conservation and Nature Study Programme organized by the Tamil Nadu Government Museum, Egmore, Chennai on 11th August. Identification service on 11 species of freshwater fishes was rendered to the SRM University, Kattankulathur. Biometric data of two specimens of *Amblypharyngodon microlepis* were provided to Adayar Poonga. One marine fish was also



Puntius rohani Rema Devi, Indra & Marcus Knight, a new species of barb from the southern Western Ghats

identified as *Acanthurus xanthopterus* Valenciennes from photograph for an aquarium hobbyist.

Publications:

1. Rema Devi, K., T.J. Indra & J.D. Marcus Knight, 2010. *Puntius rohani* (Teleostei: Cyprinidae), a new species of barb in the *Puntius filamentosus* group from the southern Western Ghats of India. *Journal of Threatened Taxa*, 2(9): 1121-1129.
2. Marcus Knight, J.D. and Rema Devi, K. 2009. On a record of *Badis badis* (Hamilton) (Teleostei: Perciformes: Badidae) from Tamil Nadu, India, *J. Bombay Nat. Hist. Soc.*, 106 (2): 215-216.
3. Rema Devi, K. 2010. Freshwater Fishes of Andaman Islands. *Recent Trends in Biodiversity of Andaman and Nicobar Islands*, Chapter 28: 329-336. (Published by the Director, Zool. Surv. India, Kolkata).



Oligodon arnensis Shaw



Ratufa macroura dandolena Thomas and Wroughton




Purple Heron, *Ardea purpurea*



Ashy Wren- Warbler, *Prinia socialis*



Dusky Crag Martin, *Hirundo concolor*

 In this Issue


Western Regional Centre, Pune

Scientists of the Centre identified samples of Cladocera, insects, freshwater fishes and Amphibia from Radhanagari Wildlife Sanctuary and Chandoli National Park. A batch of 80 students of 5th std. of City Pride School, Nigdi, Pune and 20 M.Sc. (Zoology) students of SGM College, Karad visited the museum. A scientist of the Centre delivered lectures on “Western Ghats Streams, Aquatic Macro invertebrates and Odonates” to M.Sc. Wildlife Biology Students at the National Centre for Biological Sciences, TIFR, Bangalore and also a Lecture on “Principles and Methods in Systematics” at the Postgraduate Department of Biodiversity, Garware College, Pune. Identification service was rendered on Mollusca to a M.Phil student, Dept. of Zoology,

University of Pune. Guidance was given to a student of the Bharati Vidyapeeth, Institute of Environment Education and Research, Dhankawadi, Pune on 'Ecological Assessment of MIDC Mahad CETP'. During the month, part of the specimens of insects from the old entomology collection of the Centre was reorganized in 43 new boxes in the new compact insect storage system. One research paper was published.

Publication:

Patil, S.K., Mahapatro, D. and Panigrahy, R.C. (2009). A preliminary note on the marine and estuarine molluscs in and around Bahuda estuary, Orissa, east coast of India. *J. Bombay nat. Hist. Soc.*, 106(2): 222-224, fig.1.

 In this Issue

Gangetic Plains Regional Centre, Patna

A new species of Torymidae, *Ecdamua lehensis* (Hymenoptera: Insecta), from the cold desert of Ladakh was described. Two species of Mollusca (*Bellamyia bengalensis* and *Indoplanorbis exustus*) and 3 species of Pisces [*Garra lamta* (Ham.-Buch), *Clupisoma garua* (Ham.-Buch.) and *Chagunius chagunio* (Ham.-Buch.)] were identified out of the faunal collections from River Subernrekha (Jharkhand). A research document on the Faunal diversity of Chauris of North Bihar (IBA site IBA-IN-BR-01), dealing with 51 species of zooplankton, 19 species of Mollusca, 48 species of Pisces and 72 species of avian fauna, has been submitted for publication. Two research papers were published.

Publications:


1. Sureshan, P. M. 2010. A new species of *Ecdamua* walker from the cold desert of Ladakh, India (Hymenoptera: Chalcidoidea:

Torymidae). *Rec. Zool. Surv. India: Kolkata 110 (Part-1): Pp103-106.*

2. Gopal Sharma 2010. Current status of *Susu* (*Platanista gangetica gangetica*, Roxburgh, 1801) in River Hooghly in West Bengal, India. Published by the Director, *Rec. Zool. Surv. India: Kolkata 110 (Part-1): Pp61-69.*



Ecdamua lehensis Sureshan new species from Ladakh

 In this Issue

Marine Biology Regional Centre, Chennai

Ten species of marine sponges, 10 species of foraminiferans and one species of crab were identified and registered during the month. A senior scientist of the Centre delivered two lectures, one on the "Biodiversity Conservation in India" during the "Nature Study Programme", organised by the Government

Museum, Chennai and also delivered the Key note address on "Awareness for sustainable use of Biodiversity" during the National Seminar on "Environmental Awareness and Research for Sustainable Development" organised by the Zoology Wing-DDE, Annamalai University, Chidambaram, Tamil Nadu. A scientist of the



An Octopus in the the marine aquarium tank




Squilla



School children watching a movie on marine biodiversity in the recently fixed LCD TV

Centre served as a committee member for the above said National seminar and refereed a manuscript for an International Journal. One research paper was submitted to departmental publication. One advisory service was rendered to the Dept. of Zoology, S.K. University, Anantapur, Andhra Pradesh. The 64th Indian Independence Day was celebrated at the Centre.

 In this Issue

Western Ghat Regional Centre, Kozhikode (Calicut)

A field survey was conducted in Thusharagiri forests of Kozhikode district, Kerala on 12th August. A new species, *Anisopteromalus ceylonensis* Sureshan from Sri Lanka was described out of a collection of Pteromalidae (Hymenoptera: Insecta) received for identification from the Bohart Museum of Entomology, U.S.A. During the month, 5 species of Scelionidae (Hymenoptera) in the collection were confirmed to be new to science and their description and illustration work initiated. Besides, 5 species of mantids from Bhadra Wildlife Sanctuary, Karnataka, and 9 species of Odonata from various localities of Western Ghats, including a genus hitherto unreported from South India, were identified. Data compilation for the preparation of faunal Atlas pertaining to the endemic Amphibians and Odonata of Western Ghats were continued.



Anisopteromalus ceylonensis Sureshan, a new species of Pteromalidae (Hymenoptera) from Sri Lanka

Three research papers and an online checklist were published, 2 research papers were accepted and one communicated during the month. A chapter on Amphibia of Karnataka, dealing with 88 species has been submitted to the Co-ordinator of the programme for the document on the *Fauna of Karnataka (Stae Fauna Series of ZSI)*.

Three identification/advisory services (on the mollusk, *Pila virens*; a bird, the Red Spurfowl, *Galloperdix spadicea*; on the egg parasitoids of Rice black bug, *Scotinophara bispinosa*) were rendered.

A workshop for 'Leaders of Teacher Organisations', organised by the District Education Committee, Kozhikode, was held in the auditorium of the Centre on 5th August and a senior scientist of the Centre briefed the participants about the



First record of Yellow-bellied Sea Snake, *Pelamis platurus*, from northern Kerala



A confiscated baby palm civet brought to WGRC for identification by the Kerala Forest Department officials

activities of the Survey during the inaugural session of the Workshop. A senior scientist of the Centre delivered a talk on the topic 'Biodiversity is life; biodiversity is our life' at the Regional Science Centre & Planetarium, Calicut, on 7th August, in

connection with the inauguration of the year long programmes of the *International year of Biodiversity*, organized by the Science Centre in collaboration with Zoological Survey of India, Calicut; Dept. of Forests, Govt. of Kerala; WWF-India (Kerala Chapter) and the Malabar Botanical Garden, Calicut. Another scientist of the Centre also delivered a talk on 'Wetland biodiversity', during the multimedia and interactive session of the same programme. A scientist of the Centre also delivered a lecture on the topic, 'Animal diversity of Western Ghats', during the lecture session organized at the Centre for the students of Purushotham Gokhale U. P. School, Mutati, Kozhikode dist., on 11th August.

A scientist of the Centre attended the *Trainers Training Program on SEM* at Singapore from 26th-28th July'10.

A Checklist of Amphibia of India, updated till July 2010, a video on the freshwater eel, *Monopterus digressus* and the advertisement Call of the frog, *Pseudophilautus amboli*, recorded by the scientists of the Centre have been uploaded in the ZSI website, www.zsi.gov.in.

During the month, 187 visitors paid their visits to the museum.

Staff of the Centre celebrated the 64th Indian Independence Day and 'Onam', the traditional festival of Kerala, on 15th August and 20th August, respectively.

Publications:

1. Sureshan, P.M. 2010. A new species of *Anisopteromalus* Ruschka (Hymenoptera: Chalcidoidea: Pteromalidae) from Sri Lanka. *Journal of Threatened Taxa*, 2(9): 1144-1146
2. Gopalakrishna Bhatta, K. P. Dinesh, P. Prashanth, Nirmal U. Kulkarni & C. Radhakrishnan. 2010. New site records of *Gegeneophis goaensis* and *G.mhadeiensis* (Gymnophiona: Caeciliidae) from the Western Ghats of Goa and Karnataka. *Journal of Threatened Taxa*, 2(8): 1105-1108.
3. Muhamed Jafer Palot & C. Radhakrishnan, 2010. First record of Yellow-bellied Sea Snake *Pelamis platurus* (Linnaeus, 1766) (Reptilia: Hydrophiidae) from a riverine tract in northern Kerala, India. *Journal of Threatened Taxa*, 2(9): 1175-1176.
4. K.P. Dinesh, C. Radhakrishnan, K.V. Gururaja, K. Deuti and G. Bhatta. 2010. A Checklist of Amphibia of India (updated till July 2010-Online Version).

http://www.zsi.gov.in/checklist/Checklist_Amphi.pdf.



During the workshop, 'Leaders of Teacher Organisations', conducted at WGRC by the Kozhikode District Education Committee



During the lecture session conducted for the students of Purushotham Gokhale U. P. School, Kozhikode



During the Flag hoisting ceremony on the 64th Indian Independence Day



During the Onam celebrations at WGRC, Kozhikode

ANIMAL OF THE MONTH

THE COMMON INDIAN STICK INSECT

Carausius morosus Sinéty 1901

[Text & Photo: K. P. Dinesh and C. Radhakrishnan, Zoological Survey of India, Calicut]



Carausius morosus is the common Indian stick insect. It is a species of phasmid that is often kept by individuals as pets. Culture stocks are believed to have originated from Palani Hills of Tamil Nadu, in Southern India. Being parthenogenetic, the culture stocks reproduce without mating. Males of this species are extremely rare. In captivity, gynandromorphs (individuals with both female and male characters) are at times reared. Females are elongated and grow up to 80 or 100 mm in length. They have red patches at the base of the forelegs, and similar but yellow patches on the mid-legs.

There are records of accidental introduction of the species around the world, including South Africa, Great Britain and the United States of America and there are several reports from gardeners about the species attaining pest proportions, especially in the Orange

County in U.S.A.

The Indian Stick Insect is the hardiest out of all the 'walking sticks'. On an average, they live for 6 months to 1 year. Stick insects are vegetarians and feed on leaves of herbaceous plants, shrubs and trees. They are nocturnal.

The two individuals in the photograph, apparently a male and a female, are photographed on 16th June 2010 at 8 pm in Kemmanugundi of Bhadra Wildlife Sanctuary, Karnataka, India.

Further reading:

http://www.biodiversityexplorer.org/insects/phasmida/carausius_morosus.htm

Videos:

<http://www.youtube.com/watch?v=3PmBu3cFfiQ>

<http://www.youtube.com/watch?v=lAwHGLTyL7E>

ZSI IN NEWS



News from WGRC, Kozhikode

Mhadei region, a treasure trove of caecilians

<http://timesofindia.indiatimes.com/city/goa/Mhadei-region-a-treasure-trove-of-caecilians/articleshow/6390429.cms>

Biodiversity year programmes launched: Kozhikode

<http://www.hindu.com/2010/08/08/stories/2010080851910300.htm>

News from ANRC, Port Blair

ZSI's exploration on terrestrial faunal diversity of A & N Islands

Zoological Survey of India (ZSI), Andaman and Nicobar Regional Centre has been with the objectives of ZSI are exploration, survey, inventory and monitoring of fauna of this island ecosystem, taxonomic studies on marine and terrestrial fauna, status survey of threatened and endemic fauna, preparation of data base, providing information for updating the Red Data Book, maintenance and development of National Zoological Collection and publication of research work on fauna volume, state fauna series, records of Zoological Survey of India and also in the reputed national and international journals. Till date, a total of 253 major surveys have been conducted in various islands to explore the terrestrial fauna of this island ecosystem. So far, a total of 1840 species belong to 16 orders of terrestrial fauna have been reported from Andaman and Nicobar Islands by this centre.

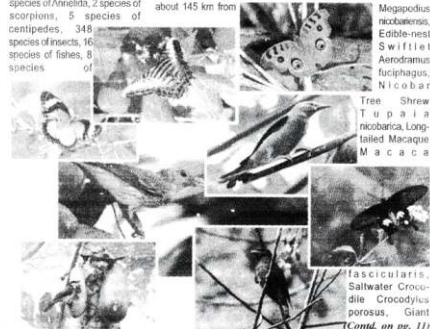
Saddle Peak National Park: It is the highest peak of these islands possessing a number of endemic species. The Saddle Peak National Park in the North Andaman is also part of the proposed North Andaman Biosphere Reserve. Total of 20 species of mammals, 96 species of birds, 26 species of reptiles,

16 species of fishes, 7 species of amphibians and 227 species of insects. Mount Harriet National Park, So far, 529 species are known from Mount Harriet National Park, of which 149 are endemic to species/subspecies level. The highest endemism has been recorded in case of butterflies, which is more than 66 per cent followed by the birds (50 per cent). These two groups have been extensively studied in these islands. Besides, 7 species of Annelida, 2 species of scorpions, 5 species of centipedes, 348 species of insects, 8 species of fishes, 8 species of

amphibians, 31 species of reptiles, 88 species of birds belongs to 68 genera, and 32 families, and 12 species of mammals were reported. Great Nicobar Biosphere Reserve (GNBR): The GNBR is one of the 15 Biosphere Reserves designated under the Man and Biosphere Reserve Programme of Ministry of Environment and Forests, Government of India. It is situated in Great Nicobar Island which is about 145 km from

Sumatra Island of Indonesia. The vertebrate fauna recorded so far includes 14 species of mammals, 71 species birds, 26 species of reptiles and 10 species of amphibians and 113 species of fishes. Invertebrates are represented by 7 species of annelids, 417 species of insects including 73 species of butterflies and 132 moths. The important endemic species in Great Nicobar Biosphere Reserve are, Nicobar Megapode

Megapodius nicobariensis, Edible-nest Swiftlet, Acanthopneuste fuscipennis, Nicobar Tree Shrew, Tupia nicobarica, Long-tailed Macaque



Macropus, Saltwater Crocodile, Crocodylus porosus, Giant

(Contd. on page 11)

(XIV): The Department of Fisheries is implementing various programmes under RKVY with the objective to increase fish production in the islands. Based upon the action Plan for 2010-11, Rs. 500.00 lakh is allocated for implementation of various programmes under the scheme. The programmes include: i) Purchase of Deep sea fishing vessels for fishing in A&N waters. The programme envisages subsidy assistance at the rate of 25% subject to a maximum of Rs.25.00 lakh for the purchase/construction of Deep sea fishing vessel. ii) Supply of Deep Freezer on subsidy basis to fishers. The programme aims to provide hygienic storage facility to the fishers for storing of unsold / excess fish catch for better economic returns. It provides 50% subsidy subject to a maximum of Rs. 20,000/- per Deep freezer to fishers.

ZSI's exploration....

(Contd. from page 9)

Leatherback Sea Turtle Dermochelys coriacea, Reticulated Python Python reticulatus, Coconut Crab Birgus latro, Bannan Island: 51 species of insects belonging to the orders, Coleoptera (17 species), Embioptera (1 species), Hymenoptera (6 species), Hemiptera (10 species), Neuroptera (1 species), Diptera (6 species), Lepidoptera (9 species) and Isoptera (1 species) were recorded in Bannan Islands. Fauna of Teak plantations: There are twenty six teak plantations at different places in Andaman Islands. Out of which twelve were surveyed by this centre. Twenty nine species of insect fauna associated with teak plantations. The common bird species associated with teak forests in Andaman Islands are White-bellied Sea Eagle, Andaman Serpent Eagle, Crested Serpent Eagle, Andaman Wood Pigeon, Andaman Cuckoo-dove, Long-tailed Parakeet, Vernal Hanging Parrot, Brown Coucal, Andaman Scops Owl, Brown Hawk Owl, Andaman Hawk Owl, Glossy Swiftlet, Edible-nest Swiftlet, Blue-tailed Bee-eater, Black-capped Kingfisher, Andaman Woodpecker, Forest Wagtail, Bar-bellied Cuckoo-shrike, Black-headed Bulbul, White-rumped shama, Asian Brown Flycatcher, Olive-backed Sunbird, Black-naped Oriole, Brown Shrike, Andaman Drongo, White-breasted Wood swallow, Andaman Treepie, Hill Myna, White-headed Starling, Asian Glossy Starling and Black Baza. Globally threatened and restricted range bird species are Andaman Serpent-Eagle Spilornis elgini, Nicobar Scrubfowl (Megapode) Megapodius nicobariensis, Andaman Crane Rafinesquina canina, Andaman Wood Pigeon Columba palumboides, Andaman Cuckoo Dove Macropygia rufipennis, Andaman Coucal Centropus andamanensis, Andaman Scops Owl Otus bali, Andaman Hawk Owl Ninox affinis, Narcondam Hornbill Aceros narcondami, Nicobar Bulbul Hypsipetes nicobariensis, South Nicobar Serpent-Eagle Spilornis klossi, Nicobar Parakeet Pittacula caniceps, Nicobar Scops-Owl Otus alius, Andaman Black Woodpecker Dryocopus hodgei, Andaman Drongo Dicrurus andamanensis, and Andaman Treepie Dendrocitta bayleyi. The highest conservation priority species are the Nicobar Megapode Megapodius nicobariensis, Edible-nest Swiftlet Collocalia fuschaga inexpectata and Narcondam Hornbill Aceros narcondami. The Narcondam Hornbill Aceros narcondami has an extraordinarily small range, being confined to the small, isolated island of Narcondam with an area of 6.82 km². Further studies are being carried out to explore the faunistic diversity in biologically unexplored islands of Andaman & Nicobar Archipelago.



OUT OF THE BOX

Conservation and collection of insects in India are mutually beneficial,
NOT harmful a simple reality explained

<http://www.ias.ac.in/currsci/25jul2010/163.pdf>

Cheetahs will find a home in India again

<http://www.thehindu.com/news/national/article538866.ece>

Butterflies Shed Light on How Some Species Respond to Global Warming

<http://www.sciencedaily.com/releases/2010/08/100805143049.htm>

Birds can see Earth's magnetic field

<http://www.zeenews.com/news640615.html>

Chicken came before the egg

<http://economictimes.indiatimes.com/news/news-by-industry/et-cetera/Its-official-Chicken-came-before-the-egg/articleshow/6166503.cms>

The World's first Malaria-proof mosquito 'created'

<http://www.sciencedaily.com/releases/2010/07/100715172002.htm>

Remarkable fossil cave shows how ancient marsupials grew

<http://esciencenews.com/articles/2010/07/15/remarkable.fossil.cave.shows.how.ancient.marsupials.grew>

Bald headed mynas

<http://besgroup.blogspot.com/2006/02/bald-headed-mynas.html>

Mars rocks 'may contain evidence of life'

<http://www.telegraph.co.uk/science/space/7918003/Mars-rocks-may-contain-evidence-of-life.html>

Scientists say global warming is continuing

<http://factsaboutclimatechange.com/scientists-global-warming-continuing-1004646a>

Declining algae threatens ocean food chain

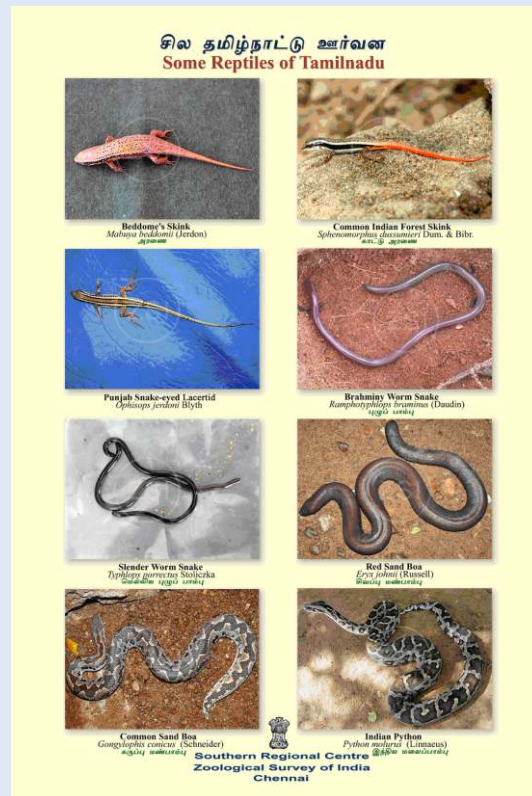
<http://www.thefreelibrary.com/Declining+algae+threatens+ocean+food+chain%3A+study-a01612286815>

Snake Venom may hold Key to Heart Disease Cure

<http://www.scientificcomputing.com/news-IN-Snake-Venom-may-hold-Key-to-Heart-Disease-Cure-080310.aspx>




PICTURE GALLERY



SRC, Chennai

AMPHIBIANS OF KARNATAKA

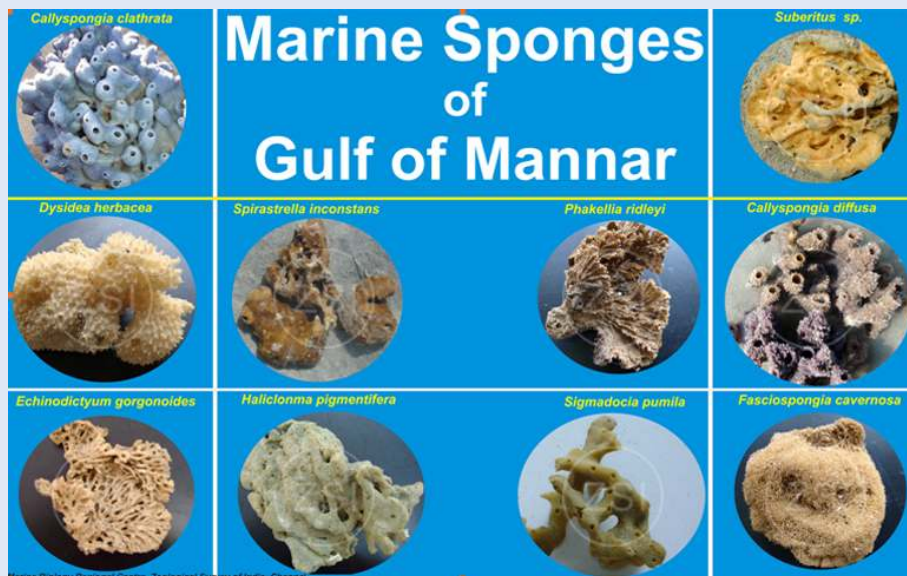

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POSTER SERIES

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PAINTINGS FROM ZSI HERITAGE ALBUM

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Musk Deer
Moschus moschiferus Linnaeus



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