SACON NEWS

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OBITUARY

Dr. S.Bhupathy, Principal Scientist, Head, Division of Conservation Ecology, Sálim Ali Centre for Ornithology and Natural History (SACON), Coimbatore, passed away on 29 April 2014 in an accident while carrying out field work at Agasthyamalai Hills, Trivandrum, Kerala.

He joined SACON as a Scientist in 1994 and became a Senior Scientist in 1999. Since 2009 he has held the post of Principal Scientist in the Division of Conservation Ecology and in May 2010 he became the Head of the Division.

Dr. S. Bhupathy was one of the finest field herpetologists in India. Some of his major contributions in the field of herpetology included ecology of reptile communities, status and distribution of fresh water turtles and tortoises throughout India, conservation of sea turtles along Tamil Nadu coast, and ecology of endangered Indian Rock Python in Keoladeo National Park (KNP), Bharatpur, Rajasthan.

Dr. S. Bhupathy, was born on 15th June 1962 at Jayankondam in Tiruchirappalli District in Tamil Nadu. In 1983, he completed his Bachelor's degree in Zoology from University of Madras and in 1985 he received his Masters Degree in Wildlife biology from Bharathidasan University, Tiruchirappalli. During 1985-1987 he worked as a field biologist in Bombay Natural History Society (BNHS), in a project entitled 'KNP Ecosystem Studies' and continued as a Scientist in the same project till 1991. In 1992 he received his Doctoral degree from Rajasthan University for his study on the 'Resource utilization of waterfowl in Keoladeo National Park, Bharatpur, Rajasthan, India'.

Though he obtained his doctoral degree in ornithology, Dr. S. Bhupathy had developed interest in herpetofauna from a very early stage in his career and this passion for reptiles, in particular, was only to be fueled while working in KNP. He has been a part of the scientific community of Wildlife Institute of India (WII) from 1991 to 1994, before he joined as a Scientist at SACON. Along with Prof. B.C. Choudhury he worked as a co-investigator during 1991-1993 in the 'Turtle and Tortoise Conservation Project', a collaborative project of the United States Fish and Wildlife Service, Government of India, and WII. Thereafter he had been a part of various projects and studies on Indian turtles across the country. During the period of field work between 1985 and 1987, he started studying the status, distribution and general ecology of Indian Rock Python (*Python molurus molurus*) at KNP. In 1999 he initiated a project on 'Monitoring of Indian Rock Python in Keoladeo National Park, Bharatpur'. Later on he was the investigator for various projects on community ecology of herpetofauna, especially on reptiles in different parts of the Western Ghats. As part of a project on the distribution of selected faunal groups in Eastern Himalayas, he studied the reptilian fauna of Teesta Valley, Sikkim during 2003-2007. Recently he has completed the study on the ecology of Indian Rock Python in KNP, Bharatpur (2007-2010). He was also the Principal Investigator of two ongoing projects; 'Pattern of distribution of selected faunal groups in Agasthyamalai Hills, Western Ghats, Kerala' and 'Spatio- temporal burrow use pattern of vertebrates in KNP, Bharatpur, Rajasthan'.

His areas of research covered various biogeographical zones of India from Eastern Himalayas to the Western Ghats. His noteworthy research on Indian Rock Python, which spans almost 28 years has made him an authority on pythons in South Asia. Dr. S. Bhupathy has over 70 national and international research publications in peer reviewed journals including full papers and short communications. He completed 16 ecological research and 34 Environmental Impact Assessment projects. Apart from this, his contribution to various edited volumes of books and popular articles were also noteworthy. He was an outstanding mentor to many students at various levels. He was a member of different academic councils and a subject reviewer for various scientific journals (Current Science, Herpetological Conservation and Biology, Herpetologica, Hamadryad, Journal of Bombay Natural History Society, Journal of Threatened Taxa, Indian Forester etc.). His professional experience was recognized by various organizations such as Etholgical Society of India, Central Zoo Authority and BNHS. Since 2007 he was one of the core faculty and planning committee members of DST-SERC School in Herpetology. He was a member of Indian Reptile and Amphibian Specialist Group as well as Tortoise and Freshwater Specialist Group of IUCN/SSC since 1994. In addition to that he was also the member of Python and Boa Specialist Group of IUCN/SSC.

His simplicity, humility, professionalism and above all his love for conservation always made him an endearing persona for mentors, friends, colleagues, students and for the conservation community at large. The sad demise of Dr. S. Bhupathy is a huge loss for the conservation community and has left an irrecoverable void in Indian herpetology.

First DST-SERB School in Avian Biology at SACON (26 Dec, 2013 – 07 Jan, 2014)

The Science and Engineering Research Board of Department of Science and Technology (DST-SERB), Government of India is a statutory body established to promote and support basic and applied sciences in the country. One of the key initiatives of the Board is to conduct a series of training workshops (Schools) in each scientific discipline for researchers and also scientists in their early research career so that they gain first hand exposure to contemporary ideas and modern tools and techniques. The teaching faculty of each School would typically include leading scientists drawn from different institutions, selected by a National Planning Committee constituted for each School. As of today, DST-SERB has been supporting over dozens of Schools in various thematic areas in biology including School in Herpetology with which SACON is closely associated since its inception. In this regard, SACON mooted the idea of a training school in ornithology and DST readily supported the proposal and constituted a

National Planning Committee under the Chairmanship of Dr. Vinod Kumar, Professor, University of Delhi to plan and execute the programme. The other members of the Committee included Dr P.A. Azeez (Director, SACON) as Director of the School, Dr. Doyil T. Vengayil (DST) as Member-Secretary, Dr. K.S. Krishnan (National Centre for Biological Sciences, Bangalore), Dr. Mewa Singh (University of Mysore, Mysore), Dr. Dinesh Bhat (Gurukula Kangri Vishwavidyalaya, Haridwar), and Dr. Kartik Shanker (Indian Institute of Science, Bangalore). The Committee subsequently identified SACON to host the inaugural School.

The first meeting of the National Planning Committee took place at SACON Campus during 2-3 July, 2013. Dr. Rajah Jayapal, the Course Coordinator, First School in Avian Biology, presented a brief proposal on course duration, schedule, structure, class size, and teaching faculty. The Committee discussed these points at length over the next two days, and formulated a blueprint for the first School along with a time schedule. It was decided to conduct the School between 26 December, 2013 and 7 January, 2014 with about 20-25 students to begin with. The Committee also recommended that the entire course be bundled in one Orientation module and six Core modules, viz., evolution, biogeography, and phylogeny, physiology of seasonal processes, behavioural ecology, community ecology, conservation biology, and frontiers in avian biology. The Committee identified a list of core faculty for the School along with module coordinators and guest faculty.

First notice inviting applications to the first School in Avian Biology was sent out to all the institutions and organizations through emails and post during the second week of August 2013. An exclusive website (www.avianbiologyschool.org) was also launched on 30 August, 2013 with all the details of the School including procedures for applying for the course. Subsequently, an advertisement was also published in the journal Current Science (Volume 105, No. 6, dated 25 September 2013). Eighty applications from over 50 institutions were received.

The National Planning Committee, in their second meeting held at SACON during 28-29 October, 2013, thoroughly scrutinized all the applications received. After rejecting two underqualified applications, the Committee members assessed each of the 78 applicants. Of these, 13 were from university faculty, 51 were from research scholars currently pursuing PhD, and 14 were from M.Sc. students. There were two applicants from SAARC countries, one each from Bangladesh and Sri Lanka. The Committee adopted a comprehensive set of criteria that included topic of MSc dissertation, subject of research project currently associated with, registration for PhD, awards/fellowships/grants received, previous research experience in avian biology, research publications and conferences attended, participation in professional training / workshops / symposia, professional skills (field / lab) achieved, statement of purpose, and recommendation from referees, besides the age and seniority of the applicant. After evaluation, the Committee provisionally selected 20 candidates to participate in the first School in Avian Biology. The final list comprised three faculty including one from Bangladesh, one in-service officer of the Ornithology Cell of the Indian Air Force, and 17 research scholars. However, two selected candidates could not attend the School due to some personal reasons.

After the completion of formal registrations of the participants, the first School in Avian Biology was inaugurated, in a brief ceremony, by Dr. Vinod Kumar, Professor, University of Delhi and Chairman of the School on 26 December, 2013 at SACON. This was immediately followed by regular classes and lecture series. Typically, each day would start at 0930hrs with a 15-minute long quiz (from the lectures on the previous day) followed by four teaching sessions each with 1.5 hrs duration from 0945 to 1715 hrs. The first three days of the School were covered by the Orientation Module and included introductory lectures on topics ranging from birds as model systems, biogeography of Indian birds, avian evolution, avian brain and neurobiology, population genetics and molecular ecology, vocalizations in birds, to avian frugivory. This was followed by the six Core Modules. The module on physiology of avian processes lasted for two days and included lectures and a practical on chronobiology of birds and reproductive physiology of birds. Community ecology was covered by theory and practical sessions in bird-habitat studies, competition

in avian assemblages, ecology of bird communities, and ecomorphology. The module on behavioral ecology included lectures on asking questions in evolutionary ecology of birds and current ideas in bird behavior. A good number of lectures on bird conservation and management along with case-studies marked the conservation biology module. The core module on biogeography and phylogeny contained a couple of lectures on fundamentals of molecular biogeography and macroecology with interactive mini-workshops. In between, Dr Krishnan gave a couple of lectures on frontier areas of research in avian biology. Meanwhile, Dr. Doyil T Vengayil, Scientist with DST, also visited the School and interacted with the participants.

A field trip to the Silent Valley National Park, Kerala was conducted for a day on 6 January, 2014 to expose the participants to conservation issues at the grassroots level and the strategies for effective protected area management being successfully adopted in the Park. During the day trip, the participants also had the rare opportunity of seeing a large number of mammals, birds, butterflies, and some of the native flora.

The School formally closed on 7 January 2014 with a Validation Ceremony in which Dr. Dinesh Bhatt, Professor and Dean, Faculty of Life Sciences, Gurukula Kangri Vishwavidyalaya, Haridwar and Dr. P.A. Azeez, Director, SACON spoke on the need for such advanced training schools for capacity-building of our researchers and gave away certificates and awards to all the participants who successfully completed the course. Ms. Parveen A. Shaikh of Bombay Natural History Society and Mr. Pankaj Koparde of SACON topped the course. A couple of participants also spoke on their personal experiences with the School and appreciated the programme in terms of the course structure, teaching inputs, logistics, and exposure to modern trends in avian biology. The general written feedback of all the students also amply reflected this endorsement and appreciation. In the end, the Course Coordinator gave a formal vote of thanks to DST, participating / collaborating institutions, student participants, teaching faculty, and SACON staff and students.

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Encounters with the royal kind! Is it what I am thinking ?

We all have something to fear; be it fear of ghost, darkness, height, speed or even exams. Some objects or situations which we never want to confront in our lives again. I encountered similar feelings when I once visited Katraj Zoo also called as Rajiv Gandhi Zoological Park in Pune. The zoo is well known for its snake park. My first visit to the reptile section, coincided with power failure and the place being poorly lit, I stood near a glass enclosure straining my eyes to see what was inside. As the power was restored I suddenly noticed a large snake coiled and slumbering in the corner. Initially I didn't recognize the snake and also failed to notice the name plate. Slowly the snake started uncoiling until it almost covered the whole enclosure; it raised itself and stared down at us majestically. By that time few more visitors had gathered and really, we were all rooted to our ground to witness such a sight. Such a huge Snake! About 9 feet long, standing tall and strong was the the King Cobra, the largest venomous snake in the world.

I had never seen a King Cobra before and almost like a reflex a thought crossed my mind that I would never see one in the wild either. If ever I do, I would straight away drop dead without it doing anything. Little did I know, that I would be having a short encounter again with the King in times to come.

I was undertaking field work in Athirumala, the last base camp to Agasthyamalai Hills, Kerala. This place is surrounded by evergreen forest and the ever changing view of Agasthya Mountain is a treat to the eyes.

After finishing my bird sampling, I planned to visit a new place about 4-5 kms away from the camp at an elevation of 1300 meters. Compared to the tall evergreen forest in Athirumala this particular area had high elevation shola forest with vast grassland, dominated by bamboo clumps. Also it was quite the liking of Indian Gaurs and elephants as was evident by the copious dung and hoof marks and not to forget the Kerala Laughing thrush *Garrulax fairbanki meridionale* endemic to these high elevation forest who were giving me enquiring looks now and then with their unique calls from the bushes. Since it was a vast open grassland with shola patches I was sure to find some raptors, though I managed to a locate few, they were

too far away even for my binoculars. While scouring the area I suddenly saw some movement 10 meters away from me and then it stopped. Irritated as I was in my failing attempt to sight some raptors, I thought I was just imagining. Curiosity, took better of me and optimism held me up to look through the binoculars.

I saw something!!! Is it really what I am thinking? Am I being stared back? The hazy background cleared, and the scene slowly unfolded with the "King Cobra" coming into view. As much as I was amazed to see it the same feeling gushed down this time as well. It looked healthy almost reaching 8 feet in length and indeed was a good specimen. We had a staring contest lasting for some 7 minutes. Meanwhile I took some photographs and signalled my assistant Chandu who himself was lost awestruck on seeing the snake. After observing us for some time it turned back slowly and vanished into the bamboo clumps. Well, the encounter was not that horrific; in contrast to what I had imagined before. Feeling delighted in sighting a King Cobra in the wild for the first time that too in this high elevation forest, I thought of venturing closer to the place. While exploring the site I suddenly saw, from the corner of my eye, the snake coming straight towards me. It seemed to be unaware of my presence, just few meters away. Scared of seeing it so close I moved back a little. Sensing my movements the snake immediately stopped, raised itself a bit, turned and quietly slithered back into the bushes.

'Well, that was too close' I thought to myself and immediately moved ahead leaving the cool King before it could get other ideas.

The day turned out to be quite eventful not only because of the sighting of the King Cobra but, we sighted a Shaeen Falcon *Falco peregrinus peregrinator* quite an uncommon species, sitting over the rocky edge of the cliff. Agasthyamalai Hills, popularly known as the sacred abode of Rishi Agasthya, are well known for its unique vegetation, forest and wild animals. Each and every visit to this place amazes me with its sheer beauty, faunal diversity and constantly changing weather. I always wonder what else are these marvellous forests hiding in their folds.

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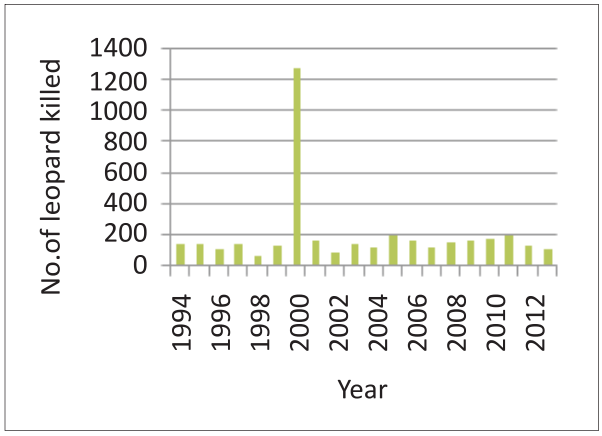
Human – Leopard Conflict in Rajouri district of Jammu region, Jammu & Kashmir, India



The Indian Leopard *Panthera pardus fusca*, is widely distributed in the Indian Subcontinent. It is classified as 'Near-threatened' by IUCN since 2008. The species *Panthera pardus* may soon qualify for the 'Vulnerable' status because of its increasing habitat loss, poaching for illegal trade and conflict situations, which together cause the population decline.

In India, the findings of Wild Life Protection Society of India (WPSI) revealed that 3968 leopards were killed from 1994 to 2013. The maximum number (1278) of leopards was killed in 2005. Even with the successive attempts to rehabilitate and protect leopards in their natural habitat made by various organizations such as WPSI, WWF, and Forest Department in various states for the last two decades or more, 110 leopards were killed in India during 2013.

On 14 January 2014 morning around 7:00AM during my field work, in Pilyarni area, Rajouri district, Jammu & Kashmir I heard a loud clamor from the local people. When I reached the place I was astonished to see a leopard surrounded by people. I came to know that this leopard had attacked a man who was injured and had managed to escape with the help of his dogs. Majority of the people gathered wanted to kill the leopard because they thought that the animal would cause harm to them and their cattle. People were much agitated and I saw some young fellows pelting stones at it. With the help of few people, who were concerned about saving the animal, I tried to prevent them from hurting the animal. Simultaneously, I informed the concerned people in the Department of Wildlife Protection and Forest. In the meantime, the local police were also informed and after half an hour, three policemen and a forest guard reached the spot.

After five hours, officials from the Department of Wildlife Protection and Forest reached the place. One of them gave a shot of tranquilizer to sedate the leopard, but he missed the animal. Meanwhile the leopard ran towards the river. People standing nearby chased without caring for their life and finally caught the animal in a net. Then, once again, the personnel from the Department successfully shot another tranquilizer, following which the animal was quickly immobilized for release elsewhere. When people surrounded the leopard that was lying semi-conscious, an old man from the village took the syringe out of the leopard's body. When I asked him the reason for his action, he said, "Son, it would be painful to him". I was touched by his empathy towards the animal which instilled in me a ray of hope for the conservation of endangered animals.

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World Forest Day and International Water Day 2014

On the occasion of World Forest Day on 21 March 2014 and International Water Day on 22 March 2014, the ENVIS Centre of Sálim Ali Centre for Ornithology and Natural History (SACON) collaborated with the Nature Club of Amrita University and conducted various events at the Techno fest "ANOKHA" held at Amrita University during 20 to 22 March 2014.

To create awareness among the students regarding conservation issues, several events viz. Quiz, Word Search, Painting, Spot the differences, Way Through Wetland and Forest game were conducted.

Students from various colleges and schools actively participated in all the events in addition to general visitors. A film related to forest and wetland was also screened. A stall was also organised to display the publications and posters of SACON ENVIS centre. In addition, posters that were part of competition based on the theme Biodiversity, Wetlands, Forest, Energy and Resource Management were displayed. The entire ENVIS team from SACON participated in the activity.

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National Conference on "Recent Trends in Zoological Research"

P.G. Department of Zoology, St. Aloysius College, Elthuruth, Thrissur, Kerala, affiliated to Calicut University and aided by the Govt. of Kerala had organized a National Conference on "Recent Trends in Zoological Research" on 25th and 26th March 2014. The Scientists, researchers and students from different places of the country participated in the conference and presented their research findings. A total of 92 abstracts, covering different issues related to Human Health; Genetics; Cancer; Occupational Hazards; Zoonotic Diseases; Fisheries, Aquatic Biology and Economic Zoology; Biotechnology & Molecular Biology; Physiology, Biochemistry, Biophysics and related disciplines; Wetland and Mangrove Studies; Animal Diversity; Entomology; and Ornithology were discussed during twelve different parallel technical sessions following inaugural and a plenary session. Dr. B. Hemambika, Programme Officer, ENVIS Centre presented the paper on "Diversity of birds from the urban wetlands of Coimbatore, Tamil Nadu, India".

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AusAID Ecotoxicology Workshop on Save Water for Future

The Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia, in collaboration with the Indian Institute for Toxicology Research (IITR-CSIR) and the National Bureau of Fish Genetic Resources (NBFGR-ICAR), India conducted a capacity building workshop on "Save Water for Future" at the NBFGR, Lucknow from 2nd to 8th December 2013.

Twenty people from all over the country participated in the workshop. The curriculum included lectures, demonstrations and "hands on" training in toxicity testing techniques such as in-vitro and in-vivo tools to characterize the effect of anthropogenic stressors on the receiving environment; risk assessment approaches, sediment and water ecotoxicology, water quality guidelines, histopathology, biochemical and molecular biomarkers for fish toxicity and, investigating the uptake, metabolism and mechanisms of toxicity of metals etc., The case studies from Australia and India covering a range of industrial (paper/ pulp, mining, energy, pesticides, tannery, pharmaceuticals and other endocrine disrupting chemicals) effluents investigating the bioavailability and toxicity of contaminants in natural and polluted waters and sediments and wastewaters were shared by eminent scientists from CSIRO Land and Water, Australia and, IITR and NBFGR, Lucknow.

Mr Ganesan Kittusamy, PhD Scholar, Division of Ecotoxicology, SACON participated in the workshop and also delivered lectures on "Pesticide residues in select components of an agro-ecosystem adopting and organic and chemical farming in Padayetti village, Kerala", "Contaminants status of rivers in Kerala : Fish as an Indicator" and "Monitoring of Environmental Contaminants in Coimbatore Urban wetlands".

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Peculiar nest site of Indian Robin *Saxicoloides fulicatus*

On 21st May 2013 around 5.30 pm during a routine bird survey in the wind farms near Samakhiali we noticed a male Indian robin sitting on a fuse box (A circuit breaker box which controls the lights below a wind turbine (23° 14´ 2.9 N, 70° 34´ 1.4E)). The bird was quick enough to disappear in a fraction of second after which we found it coming out from the fuse box. On closer observation we found that there was also a nest inside the fuse box with two nestlings inside. Indian robin builds its nests usually in the wall-holes, earth cuttings or dead tree stumps. Unusual nesting in a derelict tin can, in an iron pipe above the ground and in a scrap iron dumping have also been reported. The fuse box was fixed on the lamp post about 1.2 m above ground level. The immediate bushes dominated by *Prosopis juliflora* were about 15 m away from the nest. The nest was made of dry grass, leaves, sticks and waste soft synthetic fibre. Two nestlings (about five days old) were found in the nest. The two adult birds were busy feeding the chicks during the time of our visit. The female bird was shy and hesitant to feed the chicks in our presence and it waited until we moved away. The male bird however, went on feeding the chicks quite unmindful of our presence. During the sixty minutes of our observation, the female visited the nest and fed the chicks six times, whereas the male visited and fed the chicks eight times. Selection of this unusual nesting site maybe due to shortage of suitable habitats and it also probably diminished the chances of predation by snakes and other small mammals. The nesting of Black Ibis and House crow in power transmission pylons due to lack of trees were also recorded from this location. The increasing reports of unusual choice of nesting sites by several bird species in urban, semi-urban and even rural areas (as in this case) are interesting as it indicates the resilience and adaptability of these species to their changing environments.

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Dr R P Singh conferred with INSA Medal for Young Scientists

Indian National Science Academy conferred INSA Medal for Young Scientists to Dr.Ram Pratap Singh, Scientist, Division of Avian Physiology, SACON. The award is comprised of a bronze medal, a certificate and a cash prize of Rs.25,000.

The recipient may be considered for start-up research support with seed money of Rupees Five lakhs only per year for a period of three years. As part of his career development, Dr Singh may be considered for an interim Fellowship (amount depending on qualification and research experience) and contingency of Rs. 25,000/- per year. The tenure of the Fellowship will be for a maximum period of three years.

Dr Singh within five years of the receipt of the Award, will be considered for a visit abroad with full support, for presenting research work at conferences, and/or participating in collaborative / training research projects, wherever possible.

Dr Arun P R inducted into prestigious DST expert committee

Dr Arun, PR, Principal Scientist, Division of Environmental Impact Assessment, SACON has been inducted into the Expert Committee/Task Force constituted by the Science & Engineering Research Board (SERB) of the DST from 05th December 2013. The committee under the chairmanship of Prof. (Dr.) S.K. Sharma will be evaluating the R&D proposals to study the possible impact of EMF radiation txposure from mobile towers and handsets on life (humans, living organisms, flora & fauna & environment) and related R&D initiatives. Dr Arun has also served in the Expert Group constituted by the MoEF to study the possible impacts of communication towers on birds and bees in 2011.

सालिम अली पक्षि-विज्ञान एवं प्रकृति-विज्ञान केंद्र

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