

# Ecology and the Environment in India: Past, Present and Future

Silver Jubilee Symposium

Centre for Ecological Sciences,  
Indian Institute of Science



22-24 October, 2009

Faculty Hall, IISc

**CENTRE FOR ECOLOGICAL SCIENCES**  
**Indian Institute of Science**  
**Bangalore**

**SILVER JUBILEE SYMPOSIUM**

**Ecology and the Environment in India:  
Past, Present and Future**

**Dates: 22-24 October 2009**

**Venue: Faculty Hall, Indian Institute of Science,  
Bangalore**

**Programme**

<b>Thursday 22<sup>nd</sup> October 2009</b>		
09.30 a.m. – 09.45 a.m	<b>Inauguration</b>	Welcome by <b>Prof. R. Sukumar</b> <b>Chairman</b> Centre for Ecological Sciences Indian Institute of Science Bangalore  Remarks by <b>Prof. P. Balaram</b> <b>Director</b> Indian Institute of Science Bangalore  Remarks by <b>Prof. H.Y. Mohan Ram</b> <b>Chief Guest</b>
09.45 a.m. – 10.45 a.m	Plenary talk 1 <b>On Florican Trail</b>	<b>Madhav Gadgil</b> Agharkar Research Institute Pune
10.45 a.m. – 11.15 a.m.	Tea/Coffee	

11.15 a.m. – 12.15 p.m	Plenary talk 2 <b>Climate change and tropical biodiversity</b>	<b>Richard Corlett</b> Department of Biological Sciences National University of Singapore Singapore
<b>Theme: Behavioural Ecology and Sensory Ecology</b>		
12.15 p.m. – 1.00 p.m.	<b>Social evolution in ants, bees and wasps</b>	<b>Raghavendra Gadagkar</b> Centre for Ecological Sciences Indian Institute of Science Bangalore
1.00 p.m. – 2.15 p.m.	<b>Lunch</b>	Lawns of the Main Guest House, Indian Institute of Science
2.15 p.m. – 2.45 p.m.	<b>Understanding development and social behaviour in the cellular slime moulds</b>	<b>V. Nanjundiah</b> Department of Molecular Reproduction, Development and Genetics and Centre for Ecological Sciences Indian Institute of Science Bangalore
2.45 p.m. – 3.15 p.m	<b>The scent of prey</b>	<b>Renee M. Borges</b> Centre for Ecological Sciences Indian Institute of Science Bangalore
3.15 p.m. – 3.45 p.m.	<b>Tracking tigers across space and time</b>	<b>Ullas Karanth</b> Centre for Wildlife Studies Bangalore
3.45 p.m. – 4.00 p.m.	<b>Tea/Coffee</b>	
4.00 p.m. – 4.30 p.m.	<b>Listening in the dark</b>	<b>Rohini Balakrishnan</b> Centre for Ecological Sciences Indian Institute of Science Bangalore 560012

4.30 p.m. – 5.00 p.m.	<b>Sensory ecology of dim-light bees</b>	<b>Hema Somanathan</b> Indian Institute of Science Education and Research College of Engineering Trivandrum Campus Trivandrum
5.00 p.m. – 5.30 p.m.	<b>Ecology and evolution of behavioural decisions in blackbuck</b>	<b>Kavita Isvaran</b> Centre for Ecological Sciences Indian Institute of Science Bangalore
5.30 p.m.	<b>Tea/Coffee</b>	
6.00 p.m. – 7.00 p.m.	<b>Special Evening Lecture</b>  <i>Hortus malabaricus</i>	<b>H.Y. Mohan Ram</b> Emeritus Professor Delhi University, Delhi
7.15 p.m.	<b>Conference Dinner</b>	Lawns of the Main Guest House, Indian Institute of Science
<b>Friday 23<sup>rd</sup> October 2009</b>		
<b>Theme: Forest Ecology and Climate Change</b>		
9.00 a.m. – 9.45 a.m.	<b>Past climate of India as revealed by proxy records</b>	<b>R. Ramesh</b> Earth Science and Solar System Division Physical Research Laboratory Navrangpura, Ahmedabad
9.45 a.m. – 10.30 a.m.	<b>Climate change and the future of tropical forests</b>	<b>R. Sukumar</b> Centre for Ecological Sciences Indian Institute of Science Bangalore

10.30 a.m. – 11.00 a.m	Tea/Coffee	
11.00 a.m. – 11.30 a.m.	<b>Climate change and forests, CO<sub>2</sub> emissions, carbon sequestration and impact-vulnerability assessment for India</b>	<b>N.H. Ravindranath</b> Centre for Sustainable Technologies and Centre for Ecological Sciences Indian Institute of Science Bangalore
<b>Theme: Phylogenetics and Conservation Genetics</b>		
11.30 a.m. – 12.00 noon	<b>Why the Indian subcontinent holds the key to global tiger recovery</b>	<b>Uma Ramakrishnan</b> Ecology and Evolution National Centre for Biological Sciences Bangalore
12.00 noon – 12.30 p.m.	<b>Gondwanan relicts and out-of-India hypothesis</b>	<b>Praveen Karanth</b> Centre for Ecological Sciences Indian Institute of Science Bangalore
<b>Theme: Wildlife and Marine Ecology</b>		
12.30 p.m. – 1.00 p.m.	<b>Disease as an ecological process</b>	<b>Milind Watve</b> Indian Institute of Science Education and Research Pune
1.00 p.m. – 2.00 p.m	<b>Lunch</b>	Lawns of the Main Guest House, Indian Institute of Science
2.00 p.m. – 2.30 p.m.	<b>Catastrophes, change and coastal systems</b>	<b>Rohan Arthur</b> Nature Conservation Foundation Mysore
2.30 p.m. – 3.00 p.m.	<b>From marine turtles to musth bulls: does biology inform conservation ?</b>	<b>Kartik Shanker</b> Centre for Ecological Sciences Indian Institute of Science

		Bangalore
3.00 p.m. – 3.30 p.m.	Tea/Coffee	
3.30 p.m. – 4.30 p.m.	<p><b>Special Lecture</b></p> <p><b>Solar and Wind Energy</b></p> <p>(Sponsored by the Indian Academy of Sciences and Indian Institute of Science)</p>	<p><b>Prof. Walter Kohn</b> Nobel Laureate in Chemistry (1998) University of California Santa Barbara USA</p>
<b>Theme : Ecological History</b>		
5.00 p.m. – 5.30 p.m.	<b>Lions, cheetahs and others in the Mughal landscape</b>	<b>Divyabhanusinh Chavda</b> "Suryodaya", 310 Gom Defence Colony Vaishali Marg Jaipur
5.30 p.m. - 6.00 p.m.	<b>Colonial forestry and forest regeneration: Experience of taungya in a frontier province</b>	<b>Arupjyothi Saikia</b> Department of Humanities and Social Sciences Indian Institute of Technology Guwahati
6.00 – 6.30 p.m.	<b>Ecology and history in India: The last twenty five years and after</b>	<b>Mahesh Rangarajan</b> Department of History Delhi University, Delhi
7.00 p.m.	<b>Dinner</b>	Lawns of the Main Guest House, Indian Institute of Science
<b>Saturday 24<sup>th</sup> October 2009</b>		
<p><b>Presentations by the CES Alumni and Students</b></p> <p>9.30 a.m. to 1.00 p.m.</p> <p>followed by lunch</p>		

## Saturday 24<sup>th</sup> October 2009

### Presentations by the CES Alumni and Students

9.00 a.m. - 9.15 a.m.	Use of free and open source geospatial tools in conservation	<b>S.N. Prasad</b> SACON, Hyderabad
9.15 a.m. - 9.30 a.m.	Life-history evolution in <i>Drosophila</i> : A tale of two traits	<b>Mallikarjun Shakarad</b> Delhi University, Delhi
9.30 a.m. - 9.45 a.m.	Large mammal biogeography and behaviour	<b>T.N.C. Vidya</b> JNCASR, Bangalore
9.45 a.m. - 10.00 a.m.	Traditional management of wildlife and biodiversity in village ecosystems of lower Gangetic flood plains	<b>Silanjan Bhattacharyya</b> West Bengal State University, Barasat, West Bengal
10.00 a.m. - 10.15 a.m.	Deforesting and Reforesting Landscapes: Linking Pattern With Process	<b>Harini Nagendra</b> ATREE, Bangalore and Indiana University, USA
10.15 a.m. - 10.30 a.m.	Late Cretaceous diversification of select Scolopendrid centipedes in the Western Ghats of South India	<b>Jahnvi Joshi, CES</b>
10.30 a.m. - 11.00 a.m.	<b>Tea/Coffee break</b>	
11.00 a.m. - 11.15 a.m.	Why study <i>Phyllanthus emblica</i> ?	<b>Soumya Prasad, CES</b>
11.15 a.m. - 11.30 a.m.	Dispersal determinants in butterflies	<b>Sandhya Sekar, CES</b>
11.30 a.m. - 11.45 a.m.	Why do birds participate in mixed-species foraging flocks?	<b>Hari Sridhar, CES</b>
11.45 a.m. - 12 noon	Artificial reef technology for coastal ecosystem & livelihood revival	<b>Utkarsh Ghate</b>

12 noon – 12.15 p.m.	Microhabitat selection in a community of crickets of a tropical evergreen forest: Implications for acoustic communication.	<b>Manjari Jain, CES</b>
12.15 p.m. – 12.30 p.m.	Bats of Kudremukh National Park	<b>H. Raghuram, CES</b>
12.30 p.m. – 12.45 p.m.	Vertebrate biogeography in Western Ghats	<b>Vijay Kumar, CES</b>
12.45 p.m. – 1.00 p.m.	Regulation of reproduction in the primitively eusocial Wasp <i>Ropalidia marginata</i> : on the trail of the queen pheromone	<b>Aniruddha Mitra, CES</b>
1.00 p.m. – 1.15 p.m.	Night life of Night frogs	<b>K.V. Gururaja, CES</b>
1.15 p.m. – 1.30 p.m.	Reducing the babel in plant volatile communication: using the forest to see the trees	<b>R. Yuvaraj, CES</b>
1.30 p.m.	<b>Lunch</b>	Lawns of the Main Guest House, Indian Institute of Science