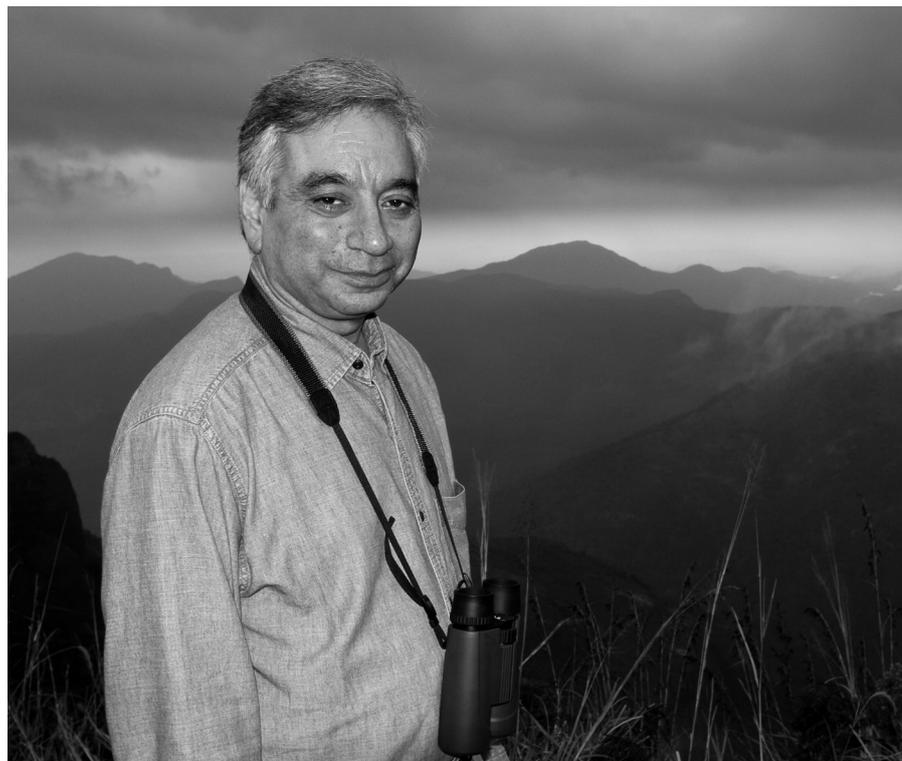




World's first major award for sustainability to ATREE founder and President

ATREE founder President, Dr. Kamal Bawa, received the first major international prize for scientific work that promotes sustainable development – the GUNNERUS Sustainability Award.

Dr. Bawa received this award for his pioneering work on population biology in rainforest areas. As per the GUNNERUS jury, "Kamal Bawa's early research on the population biology of tropical forest trees... revolutionized our thinking regarding the ecology and evolution of forest trees, and thereby directly enhanced our ability to conserve tropical forests. His discoveries of unusual breeding systems, novel pollination mechanisms, and a diverse array of flowering patterns in tropical forest trees changed the prevailing notions about the population biology, ecology, and evolution of these trees." Dr. Bawa has carried out his research in Central America, Western Ghats and the Himalayas.



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The objective of the Gunnerus award is to encourage research that contributes to the conservation of biological diversity in the context of sustainable development. It will be awarded every two years, starting in 2012, and will carry 1 million NOK (US\$190,000) in prize money. The award is the result of collaboration between DKNVS, Sparebank1 SMN and the society Technoport. Professor Kristian Fossheim, President of DKNVS said, "We are very pleased to have selected such a worthy winner of the first Gunnerus award...DKNVS aims to make this a global prize of quality and importance worthy of comparison to the Nobel Prizes in science."

The Gunnerus award is named after Bishop Johan Ernst Gunnerus (1718-1773) founder of the Royal Norwegian Society of Sciences and Letters (DKNVS), and Norway's first internationally acclaimed naturalist. DKNVS celebrated its 250th anniversary in 2010, and is among the oldest academies in the world.

Western Ghats are now a world natural heritage site

On 2 July 2012, UNESCO's World Heritage Committee meeting at St Petersburg, Russia, inscribed five more natural World Heritage Sites, including the Western Ghats in peninsular India. ATREE was one of three contributing organizations to the proposal that was submitted to the UN in 2006 by the Ministry of Environment and Forests, recommending 39 clusters in the landscapes of Agasthyamalai, Periyar, Anamalai, Nilgiris, Upper Cauvery in Kodagu, Kudremukh, and Sahyadri for the UNESCO nomination. Nature Conservation Foundation, Mysore and Wildlife Institute of India, Dehradun were the other organisations that provided expert inputs to the proposal.

Jagdish Krishnaswamy, senior fellow with ATREE, helped make the case for the Western Ghats nomination in the original proposal. He later

became member of the Western Ghats Natural Heritage Committee whose mandate was to address the conservation, development and livelihoods concerns, and manage the site with respect to stated UNESCO goals. He also liaised with the IUCN during its evaluation processes and is currently heading the regional implementation team of the CEPF grant for the Western Ghats. Krishnaswamy points out that despite the challenges in managing the most densely populated hotspot in the world (the Western Ghats ecosystems and their services support over a hundred million people directly and indirectly), the site has retained about 23% of its original natural habitat. He notes that wide-ranging large vertebrate species have not only survived, but are doing much better than in other parts of tropical Asia and boast the healthiest populations (the Western Ghats comprise less than 6% of India's land mass, but support 30% of its plant, fish, amphibian, reptile, bird, and mammal species, including the endemic lion tailed macaque, the Asiatic elephant, tiger, leopard and gaur). Krishnaswamy believes that the lifestyles, land-use practices, cultures and attitudes of the diverse communities of the Western Ghats have made this possible.

This is one of the rare times that a cluster of sites, rather than individual sites, has been nominated for inscription. The nominated sites account for only 5% of the area of the Western Ghats, but are representative of the diversity contained within the ghats, where variation in rainfall patterns, terrain and temperature-elevation gradient have resulted in diverse and distinct

ecological values. The sites cover a variety of habitat types, including localized centres of endemism. The selection of the sites was based on spatial analysis and independent feedback on world heritage values; habitat integrity and continuity; absence of large settlements, major roads and pressures; absence of conflicts with development projects; and, selection in other lists such as IBAs, Project Tiger and Project Elephant. This cluster will cover 7953 km² of the 160,000 km² stretch of the Western Ghats.

Read more in *Das, A., J. Krishnaswamy, K. S. Bawa, M. C. Kiran, V. Srinivas, N. Samba Kumar, K. U. Karanth. 2006. Prioritisation of conservation areas in the Western Ghats, India. Biological Conservation 133: 16-31*

Research

Connecting the dots from Thailand to southern Western Ghats

Ichthyologists have been intrigued by the discovery of a new freshwater fish with an interesting disjunct distribution: the *Pristolepis* genus, which has four valid species, is found in the Sunda Islands and Indo-China, then skips across the Indian peninsula, to the Pamba and Chalakudy rivers in Kerala. The new freshwater fish species is called *Pristolepis rubripinnis* because of the distinguishing orange red characteristic of the fish (from Latin *ruber*, red, and *pinna*, wing).

This discovery is the result of a collaborative taxonomic study by ichthyologists led by Ralf Britz of Natural History Museum London, with K Krishnakumar of ATREE and

Fibin Baby of Conservation Research Group (CRG), St. Albert's College, Kochi. The paper announcing the discovery was published in *Zootaxa*.

The first species from the *Pristolepis* genus, *Pristolepis marginatus*, was described 163 years ago by Thomas Jerdon from the erstwhile Malabar in the southern part of the Western Ghats. The genus *Pristolepis* comprises fishes of the size 15–20 cm. Currently, only four species of the genus *Pristolepis* are considered to be valid. *P. rubripinnis* differs from congeners by its colour pattern. It shows orange red soft dorsal, soft anal and caudal fins, and a yellow to orange pelvic fin. It differs further from its south Indian congener *P. marginata* and the Sundaic *P. grootii* in having 4–5 scales above the lateral line versus 3, and 10 scales below it versus 9, and from south east asian species, *P. fasciata*, in the absence of prominent bars on the body.

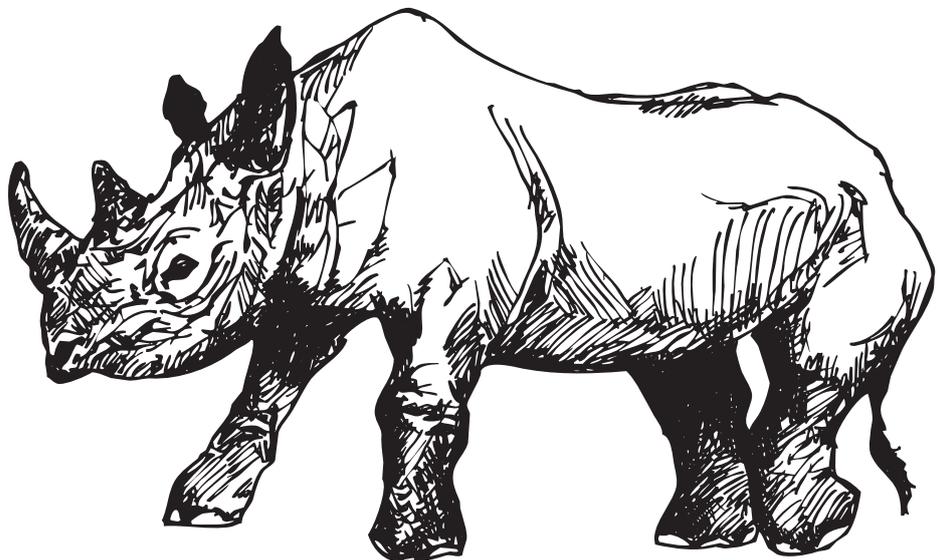
Discoveries such as these remind us that our knowledge of the fishes of Western Ghats is still poor, and that there is an urgent need for further exploration, systematic taxonomic research and investment. As of now, 189 species of endemic freshwater fishes have been reported from the Western Ghats.

Also read about the new species of barb, *Puntius madhusoodani*, described from the Manimalariver, Kerala, in *Biosystematica*. The discovery was made during a river fish monitoring programme of the Kerala State Biodiversity Board, led by Krishnakumar from ATREE and researchers from St. Albert's College, Kochi. *Krishnakumar, K., Pereira, B and Radhakrishnan K.V. 2011. Puntius madhusoodani (Teleostei: Cyprinidae), a new species of barb from Manimala River, Kerala, South India. Biosystematica Vol 5(2): 31-37*

Outreach

Nature Orientation Initiative in Kaziranga National Park, Assam

A Nature Orientation Initiative residential camp was held for students of fringe villages of Kaziranga National Park in April 2012. The objective was to enhance the awareness of these young scholars towards nature and conservation. Altogether 35 high school students participated in this four-day programme representing all the ranges of the national park.





The activities included wildlife film screening, environmental games, conservation dramas, audio-visual presentation on biodiversity issues and field visit to the park. This programme was a collaborative venture with the Assam Forest Department and partner NGOs Aaranyak, Bhumi and WWF.

*Himangshu Barua
Intern, ATREE Guwahati*

the facilities and equipment used in the conservation genetics lab. Mr. Ashaya, a design student from D J Academy of Design, Coimbatore showed how design could help in control of an invasive weed, lantana, by creating useful, saleable products out of it. In the evening, the wildlife documentary was re-screened for the residents of Sriramapura.

Ramesh Kannan and Madhavi

The students learnt about birds, reptiles, insects, amphibians, molluscs, diatoms, genetics, pollination, urban ecology, urban wildlife rehabilitation, climate change, loss of biodiversity, forest canopies. Classroom lectures were supplemented with relevant skill building such as tree climbing, honing observation skills by sketching birds and plants for identification, trapping insects, collecting and identifying diatoms.

World Environment Day celebration at ATREE

This was the fourth year of ATREE's celebration of World Environment Day on June 5. As before, we invited students and neighbours. About 130 students from four different schools participated.

Dr. Siddappa Setty, Fellow at ATREE gave a talk on environment protection. This was followed by a National Geographic documentary on Indian Wildlife Series: Elephant Kingdom. Dr. Priyadarshan's team at the Insect museum demonstrated techniques of collecting and preserving insects. Dr. Ganesan took the children through the processes and protocol of plant collection and floristic documentation at the ATREE herbarium. Dr. Ravikanth and his team walked the students through

Conservation Education

Vacation Training Programme

Every year, ATREE's Academy for Conservation Science and Sustainability Studies contributes its in-house expertise to organize an outreach and conservation education programme for students of Std 10+. This year, ten students attended the Vacation Training Programme on bioresources, conducted from 7th to 26th May 2012 in Bengaluru. The course was a mix of lectures, hands on activities, field trips and institutional visits, lab experiments and film screenings. Students from previous batches shared their experience of the course with the current batch.

Field trips to Biligiri Rangaswamy Temple Wildlife Sanctuary, Ramanagara Vulture Nesting area, Ranganathittu bird sanctuary, butterfly park in Bannerghatta National Park, waste management unit of SAAHAS, house of eco architect, Mr. Vishwanath, and the Timbaktu collective in Anantapur district of Andhra Pradesh helped expand their view of what it means to be green.

Students also worked on projects that they presented at the end of programme. The valedictory lecture was given by Dr. Uma Shaanker, Professor, University of Agricultural Sciences and founder Trustee, ATREE.

Abhisheka K.

New

Recognitions

S Lele. Visiting Scholar. Centre for Conservation Biology, Stanford University. April-May 2012

People

Ashish, Programme Officer, Allapuzha Dhanooj, Junior Research Fellow, Bengaluru

Jayalaxmi, Research Associate, Bengaluru

Murukan, Research Assistant, Allapuzha

Priyanka Jamwal, Fellow, Bengaluru

Parabita Basu, Research Associate, Bengaluru

Saravanan A, Research Associate, KMTR

Seshadri, Intern, Bengaluru

Publications

Research articles

Balachander, M., Remadevi, O. K., Sasidharan, T. O. and Sapna Bai N. (2011). Virulence and cuticle degrading enzyme activity of some isolates of *Metarhizium anisopliae* (Metsch.) against the mahogany shoot borer, *Hypsipyla robusta* Moore (Lepidoptera: Pyralidae) *Journal of Forestry Research* (In Press).

Shivanna K. R. 2012. Reproductive ecology and conservation of plant genetic resources of the wild. *Indian Journal of Plant Genetic Resources* 25: 75-84

Ticktin, T., R. Ganesan, P. Mallegowda and S. Setty. 2012. Disentangling the

effects of multiple anthropogenic drivers on the decline of two tropical dry forest trees. *Journal of Applied Ecology*. doi: 10.1111/j.1365-2664.2012.02156.

Chapter in edited book

Acharya, B. B., A. J. T. Johnsingh, et al. 2010. Dhole telemetry studies in Pench Tiger Reserve, Central India. In: *Telemetry in Wildlife Science – ENVIS Bulletin: Wildlife and Protected Areas* (eds. K. Sivakumar and B. Habib.) Vol 13, No 1: 69-79. Wildlife Institute of India, Dehradun, India.

O. K. Remadevi and T. O. Sasidharan. 2011. Ecofriendly strategies for pest management in forestry. In: *Insect pest management, a current scenario*. (ed. Dunston P. Ambrose) Pp. 432 – 444. Entomology Research Unit, St. Xavier's College, Palayamkottai, Tamil Nadu, ISBN: 978-81-981482-0-5

Popular press

S Lele. Standalone agency to map green wealth. *Economic Times* 12 May 2012

S Lele. Colonial hangover persists. *Down to Earth*. June 16-30, 2012

Presentations/ talks

Lele S. The concept of ecosystem services: Contributions, pitfalls, and alternatives. Natural Capital Project, Stanford University. Stanford, 8 May 2012

Invited lecture: Recognizing and reconciling values in interdisciplinary research. Emmet Interdisciplinary

Programme on Environmental Research, Stanford University. 30 April 2012.

Shivanna K. R. Invited participation in International discussion meeting cum workshop on Individuals and Groups. G. B. Pant Institute of Himalayan Environment and Development, Almora, Uttarakhand. 22 May – 31 May 2012. Delivered a lecture on Biotic pollination: How plants achieve conflicting demands of attraction and restriction of floral visitors.

Reproductive ecology and conservation of our plant genetic resources. G. B. Pant Institute of Himalayan Environment and Development. Almora, Uttarakhand. 27 May 2012.

Setty S. Seven talks on 'Environment and protection' for Panchayat Secretary, Presidents and Panchayat Development Officers at Mahatma Gandhi Institute of Rural Energy and Development, Bengaluru. From April to June 2012. Also to over 130 students from 5 schools on the occasion of World Environment Day at ATREE. 5 June 2012.

Presentation on FRA related work of BRT to Baiga tribal farmers group who visited ATREE under CEE and GEF-UNDP-Small Grants Programme (SGP) with partner organization Gram Sudhar Samiti, (GSS) Sidhi, Madhya Pradesh on 4 May 2012.

Talk on long-term monitoring of rock bee colonies in Biligiri Rangaswamy Temple Wildlife Sanctuary, India. At the 49th annual meeting of the Association for Tropical Biology held in Bonito (Mato Grosso do Sul, Brazil), between 18 and 22 June 2012.

Workshops organised

Bhaskar Acharya. ATREE-CEPF Western Ghats RIT organized a workshop in Tamil Nadu Western Ghats to review small grants funded by the programme in the Eastern Anamalais. The workshop had short presentations by grantees, discussions to review grant progress and plans for the remaining period of the grants. DFO Office, Theni. 15 May 2012.

Seema P. Co-ordinated and moderated the panel of ecological economists from the South, in International Society of Ecological Economics conference on the 19th of June 2012. The panel discussed 'Ecological economics and the green economy: Relevance for the south in times of global change', and submitted a joint declaration to the UNEP.

ATREE Eastern Himalayas Regional Office was part of the organizing committee for the Indian Mountain Initiative – Sustainable Mountain Development Summit II held at

Gangtok 25-26 May 2012. ATREE facilitated the discussions and inputs into the summit recommendations on the thematic area of water, and the sub themes: water hazards in the mountains; water ecosystem services; water preservation, traditional systems and innovations; and water rights, policy and governance. The summit was organized by ECOSS, with support from CHEA and several local and regional organisations. It was preceded by pre summit consultations at Kalimpong, Shillong and Kohima.

ATREE and NCBS organized a two-day seminar and workshop in Gangtok 2-3 May 2012. The seminar by students and researchers was to share with the Forest Department and other stakeholders the progress of the DBT project in Sikkim. The two follow up workshops were to build capacity among local students and researchers, and were focused on communication skills and study design.

Workshops attended

Abhisheka K. International training of trainers on Wetland Management: Facilitation of multi-stakeholder processes conducted by Wageningen UR Centre for Development Innovation. Netherlands. 11 to 29 June 2012.

Bhaskar Acharya, CEPF-ATREE Western Ghats Programme Coordinator. Networking of organizations and individuals, and creating information support for rock outcrop conservation. Organized by grantee organization Biome Conservation Foundation, as part of their ATREE-CEPF Small Grant. Pune. 26 and 27 May 2012.

Events

A delegation of Deputy Chiefs of Mission of the Nordic countries visited the Eastern Himalayas Regional Office at Gangtok on 11 June 2012. The delegation comprised Mr. Aslak Brun, Chargé d'



Affaires, Norway, Mr. Åke Peterson, Chargé d' Affaires, Sweden, Mr. Pekka Voutilainen, Minister Counsellor/DCM and Mr. Hakur Olafsson, Deputy Chief of Mission, Iceland. Dr. Sarala Khaling, Regional Director, made a presentation on the ATREE Eastern Himalayas programme which was followed by discussions on conservation and development issues in northeast India.

Grants

Abhisheka K. Fellowship by the Netherlands Government (NFP fellowship) to attend the International Training of Trainers on Wetland Management.

Vidyadhar Atkore. International Foundation for Science, 2012 project titled 'Quantifying characteristics of river fish diversity across multiple spatial scales: Implications for conservation in the Western Ghats, India. \$7500. Also Inlaks Shivdasani Foundation's Dr Ravi Sankaran Small Grant 2012 for project titled 'Drivers of fish assemblages across multiple spatial scale in the two river basins of the Central Western Ghats, India'. INR1,40,000.

Press

New high for the Ghats. Mumbai Mirror. 3 July 2012

Heritage tag eludes Western Ghats. Times of India. 28 June 2012

Son of the tiger forest. Open Magazine. 2 June 2012

15 rocky plateaus identified for conservation, protection. Times of India. 28 May 2012

World Heritage Site status still out of reach for the Western Ghats. The Hindu. 28 May 2012

Western Ghats: No UNESCO tag this year. Daily News & Analysis. 25 May 2012

Unesco's heritage status for Western Ghats deferred. Livemint. 25 May 2012

Vembanad Fish Count reveals seven new species. The Hindu. 25 May 2012

Vembanad fish count on May 23 and 24. The Hindu. 17 May 2012

Himalayas warming faster, facing severe climate change impact: Study. Times of India. 17 May 2012

Himalayas: Up there it's getting warmer, faster. Daily News & Analysis. 16 May 2012

'It is institutions that transform societies'. The Hindu. 12 May 2012

Panel to study jumbo corridor in Hassan. Deccan Herald. 5 May 2012

Be aware of resources we consume. Times of India. 29 April 2012

Indo-American Kamaljit Bawa elected to prestigious U.S. Academy. South Asian Link. 28 April 2012

ATREE training. The Hindu. 26 April 2012

An award-winner's message to the young. Technoport.

Indian elected as member of American Academy of Arts and Sciences. Bihar Prabha. 23 April 2012

Prof Kamaljit Bawa elected to the American Academy of Arts and Sciences. thehimalayanbeacon.com. 21 April 2012

Indian-born Kamaljit Bawa elected to prestigious US academy. Bengaluru News. 21 April 2012

Indian-American inducted into prestigious US institution. Itvnewsindia. 21 April 2012

Kamaljit Bawa elected to prestigious US academy. Topnewstoday.org. 21 April 2012

Indian-American inducted into prestigious US institution. The NDTV. 21 April 2012

Indian-born Kamaljit Bawa elected to prestigious US academy. Thaindian News. 20 April 2012

Indian-born Kamaljit Bawa Elected to Prestigious US Academy. Bigger India. 20 April 2012

Indian-origin Kamaljit Bawa elected member of prestigious US ... Sulekha.com. 20 April 2012

Indian-born Kamaljit Bawa elected to prestigious US academy. The Economic Times. 20 April 2012

Indian-born Kamaljit Bawa elected to prestigious US academy. New Kerala. 20 April 2012

Indian-born Kamaljit Bawa elected to prestigious US academy. TwoCircles.net. 20 April 2012

Indian-born Kamaljit Bawa elected to prestigious US academy. Newstrack. 20 April 2012

Prof Kamaljit Bawa elected to the American Academy of Arts and Sciences. Darjeeling Times. 19 April 2012

Study finds alarming rise in pollution in Vembanad lake. The Hindu. 7 April 2012.

India's forests are in serious decline, both in numbers and health. Economic Times. 5 April 2012.

Indo-French project to study effects of climate change on farming. Deccan Herald. 3 April 2012.

ATREE...Vacation Training Program. Citizen Matters. 2 April 2012.

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