

# In Focus: Partnerships for Wildlife Conservation

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"Innovation happens when people have the opportunities to throw ideas around together" (Gotian 2021)

Collaborations, whether within a country or internationally, enable better problem-solving and implementation strategies (<u>Horgan et al. 2022</u>). In their recent article <u>Maher and Noorden 2021</u> talk about a rise in collaborative research during the COVID-19 pandemic. The pandemic provided the time and opportunity for people to connect across boundaries but also encouraged learning among individuals and institutions coming together for various reasons. Even without the pandemic, collaborations and partnerships of different kinds have benefitted scientific research over time.

Wildlife Conservation Science has newer challenges that are often complex and require multi-disciplinary expertise and diverse skill set. Collaborations in conservation can be seen not only in research but also in education, training, improvement of technology and in implementation of conservation projects. Often underestimated but important collaborations are with the local actors in the landscapes, who make it possible to advance conservation projects' objectives. They include local NGOs, local people, forest frontline staff, and other stakeholders who contribute in numerous ways.

Comparatively more common are the multiple academic institutions or NGOs forming collaborative groups that work towards a common conservation cause. While groups like Satpura Landscape Tiger Partnership (SLTP) (which was established with the support of Born Free Foundation and operates regionally around the Satpuda Range in central India) have long been functional since 2004, groups like Network for Conserving Central India (2014) (provide scientific inputs for conservation, livelihood and development planning) (Neelakantan et al. 2021) were formed in the last decade. Another effort, Biodiversity Collaborative integrates minds to address challenges in conservation, sustainable development, climate change and overall human well-being, came into existence roughly much more recently. With increased accessibility to the internet and mobile phone services, collaborations like Coalition for Wildlife Corridors are also actively utilising the social media platforms like Twitter and Instagram for conservation awareness and outreach. Additionally, there are many local, small-scale NGOs working in various parts of the country that have now begun to come together for localised conservation/awareness programmes. While the localised nature of their work doesn't bring them into spotlight often, such partnerships nonetheless play a crucial role in establishing communication with local actors, laying a foundation of trust and providing first hand knowledge of the local socio-ecological systems- all of which are crucial for the initial stages of the project. And despite being small, they have the ability of amalgamating into a larger collaborative

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group in the future. In this direction, IRALE is important recent consortium of scientists, researchers, practitioners, and students from various disciplines that aims to advance landscape ecology science in biodiversity conservation.

A recent study (Vasudeva et al., 2023) looked at networks and collaborations among institutions and countries in the context of landscape ecological research. The study revealed stronger collaborative links among larger institutions within India, with the Wildlife Institute of India having the highest number of collaborations (49), followed by the National Remote Sensing Centre (31), Indian Institute of Remote Sensing (27) and National Centre for Biological Sciences (18). There has been a rise in multi-institutional, collaborative research and publications in more recent years as well. Studies by Shrivathsa et al. 2023, Schoen et al. 2021, and Thatte et al. 2021 took up a collaborative approach to build upon landscape-level conservational aspects concerning biodiversity, ecosystem services, communities and habitat connectivity. Ramesh and colleagues (2022), talk about employing another mass collaboration approach -citizen science in conservational research. Contributions from citizen science are yet another underappreciated partnership that can transform our knowledge base. With the UN celebrating Partnerships in Wildlife Conservation as the theme for this year's World Wildlife Day and IRALE being one such collaborative initiative, gives a shoutout to all such groups partnering at various scales for biodiversity conservation!

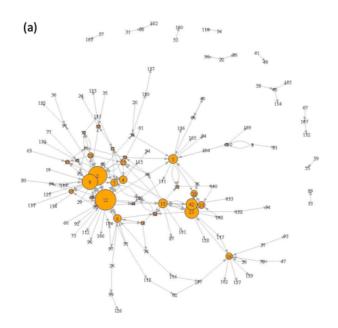
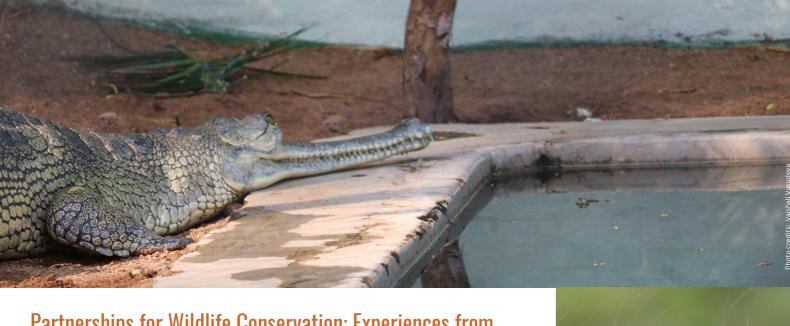


Figure contributed by: Vaishali Vasudeva, Meera Makwana, Kamna Pokhariya, Orvill Jude Nazareth, Shah Nawaz Jelil, Meghna Bandyopadhyay, Deepti Gupta, Satyam Verma, Ramesh Krishnamurthy

2: Indian Institute of Remote Sensing; 5: Indian Institute of Science; 9: National Remote Sensing Centre; 12: Wildlife Institute of India; 15: Ashoka Trust for Research in Ecology and the Environment; 21: National Centre for Biological Sciences; 42: Wildlife Conservation Society, India

Read full article <u>here</u>





# Partnerships for Wildlife Conservation: Experiences from Center for Wildlife Studies

BINDU RAGHAVAN | CENTER FOR WILDLIFE STUDIES

India is one of the megadiverse countries globally, hosting almost 8% of the world's species on 2.4% of the land, including four hotspots of biodiversity. Yet, this biodiversity shares space with close to 1.3 billion people and their approximately 536 million livestock. It is obvious that wildlife and biodiversity conservation in this scenario requires the support and cooperation of the people who live close to wild spaces. Therefore, conservation in India, by design, needs to include partnerships with the local communities and groups who are often the most affected by conservation actions and interventions.

This is, of course, easier said than done. Unlike in most other countries, In India, even the human population is megadiverse, with languages, cultures, customs, and traditions changing across even the same district within a state. Not to mention the socio-economic layers of caste and religion. Throw in the damage caused by decades of misplaced government goodwill in the form of illadvised and badly implemented development programmes and schemes, the situation often becomes more complicated. The challenge then, is to bring everybody to the same table and agree to cooperate for the greater good.

The Centre for Wildlife Studies initiated a project on 'Community Health in the Mudumalai Tiger Reserve". One of the main goals was to understand people's perception and attitude towards wildlife and biodiversity conservation and how they perceived the contribution of biodiversity to their health and overall well-being. We also wanted to understand the health issues faced by wildlife, livestock and humans living in close proximity to each other and any associations between the same. Semi-structured interviews of households across social, caste, religious and economic groups, and focus group discussions with women and livestock owners, were used to gather this information. Our project also collected secondary data on health issues reported from wildlife, livestock and humans in the region to the forest, animal husbandry and public health departments, respectively. The idea was to bring in all the key stakeholders proximally affected by loss of biodiversity and work with them to find a common resolution.

The reality of implementing the project, however, has been far from the ideal achieved on paper. The governmental departments each have their own mandates and have their hands full with implementing their own respective schemes and programmes. There is little scope, space or incentive for communication between the departments and their officials, even at the district level. This lack of communication and partnership between the major governmental stakeholders of biodiversity and conservation is a loss for not just the community but for the departments themselves. Most of them have overlapping goals and missions and differ only in the target communities and methods. Partnerships between these key departments, especially at the district levels, could revolutionize the way development is achieved on ground, giving it a more integrated and holistic approach. The current model has only led to disjointed efforts by each that has occasionally resulted in conflicting benefits to the communities.

Another key missing link which was highlighted through our discussions with both departments and communities was the lack of consultation between the government and the people it wants to help. Most government schemes and programmes are ideated and developed by officials sitting far away from the target communities, with little to no connection with the reality on the ground. Communities are seldom asked their opinion on what they really need and what their own aspirations are. Thus, tribals with no history or experience of livestock husbandry end up receiving hybrid cattle that require skill and knowledge to manage and maintain. Women end up receiving 'homely' skills such as tailoring, crafts and food processing, without regards to their own individual



capabilities and interests. Inputs into livelihood generation rarely include marketing and sales as part of the end goal, resulting in failure of most schemes after a few years. It is not just government departments but also many well-meaning conservation and development NGOs that have been equally guilty of leaving the 'communication' out of community development. Thus, local communities end up feeling not just disenfranchised but also uninterested in pursuing any sort of relationship with the government or NGOs. This disinterest leads to an indifference and sometimes, animosity towards conservation interventions that necessarily impact these communities, with nature being the ultimate loser.

It is high time that partnerships in conservation, especially those with local communities, are truly considered as partnerships. Communities need to be consulted about their needs and requirements, and how those can be met, at the design and planning stage itself, and not just at the implementation stage. Only then can we achieve long-term, sustainable conservation partnerships.



### 59<sup>th</sup> Annual Meeting of the Association for Tropical Biology and Conservation



July 2<sup>nd</sup>-6<sup>th</sup>, 2023 Coimbatore, India

### **Balancing Science, Conservation, and Society**



### **IRALE to host ATBC 2023!**

The Association for Tropical Biology and Conservation (ATBC), Indian Regional Association for Landscape Ecology (IRALE) and Kumaraguru Institutions (KI), take pleasure in extending warm welcome to all delegates and participants of the 59th Meeting of the ATBC. Located in the lap of Western Ghats, one of the oldest mountain range, known for its high biodiversity, the venue Coimbatore in Tamil Nadu, India is a multicultural vibrant city. Conservation has always been an integral part of societal value in the country. From the high mountains of the Himalaya, through the Gangetic flood plains, north-eastern hills, central Indian highlands, vast deserts, the eastern ghats, the western ghats and large coastal and marine system are symbolic of unique species assemblages. The leadership in science, conservation and societal development can be seen across diverse biogeographic zone of India. Together with the researchers and leaders of tropical biodiversity and conservation, ATBC 2023 aims to explore and illustrate the options and opportunities for balancing science, conservation and society around the world of tropical biodiversity!

### **MEETING THEME**

Balancing Science, Conservation and Society

#### **IMPORTANT DATES**

- Deadline for submission of symposia proposals: January 15th, 2023
- Opening of the call for abstracts (symposia, open presentation, speed talks, posters): February 1<sup>st</sup>, 2023
- Deadline for abstracts submission (symposia, open presentation, speed talks, posters): March 25<sup>th</sup>, 2023
- Deadline for submission of workshops and field courses proposals: March 25th, 2023
- Open meeting registration: May 1st, 2023
- Deadline for early bird registration: May 20th, 2023
- ATBC 2023 Meeting: July 2<sup>nd</sup> 6<sup>th</sup>, 2023

Follow https://www.atbc2023.org/ for more updates!













### **ATBC 2023 Host Institutions**

Indian Regional Association for Landscape Ecology (IRALE) is established as a new Regional Chapter of International Association for Landscape Ecology (IALE) to nurture the science of landscape ecology in India and the neighbouring countries towards sustainable management of natural resources and human wellbeing.

Kumaraguru Institutions: Kumaraguru College of Technology, KCT Business School, Kumararguru Institute of Agriculture, Kumaraguru College of Liberal Arts and Science are part of Kumaraguru Institutions which has exemplified the interdisciplinary approach. As an institution dedicated to learning, we invest in intellectual vitality and engage with stakeholders to make a difference locally and nationally. Our contribution to this shared effort is the unique knowledge, transformative approach and skills generated by our core activities of education and research.

### **ATBC 2023 Organizing Committee**



Dr. Ramesh Krishnamurthy

Mr. C. Saravanan



Dr. Vinita Gowda CO-CHAIR



**Dr. P.V. Karunakaran** Sálim Ali Centre for Ornithology and Natural History



Mr. K. Kalidasan Osai



Dr. B. Ramakrishnan
Ooty College



Dr. Parabita Basu

### **UPDATE: OPPORTUNITIES FOR IRALE MEMBERS**

To encourage IRALE registered members to participate in ATBC 2023, the Executive Committee has taken the following decisions:

- 1. The registration fee for participating in the conference will be sponsored by IRALE and reimbursed at the Venue for all the registered IRALE members
- 2. A grant to cover the accommodation and train travel will be provided to the members whose abstract (oral presentation, speed talks and posters) will be accepted for the conference
- 3. An IRALE side event has been planned during the conference in which the members are requested to present their research even though their abstract is not accepted in any other session.
- 4. There may be Small Grant for IRALE members who are presenting papers/posters in IALE 2023. Watch this space for more updates.



# **IALE EVENTS**

# 2023 IALE World Congress - Nairobi, Kenya

The International Association for Landscape Ecology (IALE) is excited to announce the 2023 IALE World Congress will take place in **Nairobi, Kenya**, from **10th – 15th, July 2023**. The IALE World Congress occurs every four years and is the premier event for landscape ecologists worldwide to address topics in landscape ecology that range from local to global in scale. During the World Congress, landscape ecologists from public, private, and non-profit sectors will address a broad spectrum of environmental challenges and their potential solutions. The 2023 World Congress will be a hybrid (online/in person) event and it is for the first time being hosted in the Global South.

The World Congress theme is 'Transboundary Resource Management, Climate Change and Environmental Resilience'. The World Congress will include plenaries, symposium, oral sessions, posters sessions, a social dinner, and field trips. It is jointly hosted by Kenyatta University (KU), Regional Center for Mapping of Resources for Development (RCMRD), National Museum of Kenya (NMK), Institute of Climate Change and Adaptation Institute, University of Nairobi (UON), the United Nations Environment Programme (UNEP) and in collaboration with the African-Chapter of IALE (Africa-IALE).

Nairobi is an exceptionally beautiful and exceptional city (see Magical Nairobi). The planned post conference excursions include: Nairobi National Park, Karura Forest Nature trails, The National Museums, Kakamega forest ('Time has stood still for the Kakamega Forest, a remnant of the rain forest that stretched all across Central Africa') and Watamu Marine National Park and Reserve (a complex of marine and tidal habitats along the Kenya's north coast with rich and diverse bird life, fish, turtles and dugongs). Furthermore, Kenya is well known for the Great Rift Valley (Great Rift Valley). July is an excellent time to visit Kenya because it is the dry season and wildlife will be easier to see.

- Deadline for Symposium/Panel/Workshop abstract submission: 31st October 2022
- Latest Notification of abstract acceptance: 1st December 2022
- Paper/Poster Abstracts submission portal open: 1st January 2023
- Deadline for Paper and Poster abstract submission: 15th March 2023
- Latest Notification on abstract acceptance: 1st April 2023

Watch here for more information soon: www.landscape-ecology.org

Content and photo credits: IALE

# 2023 IALE WORLD CONGRESS NAIROBI, KENYA

The theme of the 2023 IALE World Congress is 'Transboundary Resource Management, Climate Change and Environmental Resilience'. The theme comprises of nine sub-themes as follows:

- 1. Transboundary ecosystems in the Anthropocene: The shared ecosystems and natural resources across country boundaries and the anthropogenic effects. How human activities are altering these transboundary ecosystems
- 2. Managing climate risk in transboundary ecosystems: Climate change and global warming in the transboundary ecosystems; mitigation, adaptation, geoengineering,
- 3. Borderlands, cross-border resources, and environmental resilience: Strengthening resilience in borderlands ecosystems, disturbance of ecosystems
- 4. Building resilience and security: Food security, water security, and livelihoods
- 5. Climate resilient livelihoods: Climate resilient agricultural practices, adaptive agriculture, agroecology
- 6. Data science and geospatial technology for sustainable landscape management:
- 7. Drivers of landscape change and sustainability at multiple scales:
- 8. Ecological sustainability in urban landscapes and smart cities
- 9. Water-Energy-Food nexus



Photo: https://www.landscape-ecology.org/World-Congress



# IN THE NEWS

Government introduces Forest (Conservation)
Amendment Bill which seeks to fast-track strategic and security related projects Read more <a href="here">here</a>

WILDLIFE & BIODIVERSITY

Beyond protected areas: This new book explores how India's conservation scene turned inclusionary

'At the Feet of Living Things' journals experiences of ecologists who practise a collaborative and socio-ecologically sensitive approach to conservation

Read more here

# How the house sparrows have returned to the backyards in India

Micro-level conservation movements have brought back their chirrup in our backyards

Read more here

Why India's forests need new stewards

Read more here

### India signs pact with Cambodia on tiger translocation

India and Cambodia signed the MoU with focus on tiger reintroduction in Cambodia in the presence of Vice President Jagdeep Dhankhar and Cambodian PM Read more here

How religious worship is boosting conservation in India

Read more here

Mexico sends 250 big cats to Indian conservation center Read more here

JICA India to loan Rs 520 crore for Forest and Biodiversity Conservation in West Bengal

Read more here

A cheetah relocated from Namibia to India as part of conservation efforts has died

Read more <u>here</u>

"Momentous Event": 4 Cubs Born To Cheetah Brought In From Namibia Read more here





# MEMBERS IN ACTION

### Evolutionary adaptations in birds for a riverine lifestyle

ANKITA SINHA | UNIVERSITY OF GEORGIA

Himalayan cascades are home to feathery creatures which have specialised to embrace torrential mountain rivers. Mostly sombre, unlike their cousins who live in the forests, these birds that live along running waters became my penchant. Riverine bird diversity has attained maximum diversity in the Himalayan mountains. I was fortunate to study this group of birds through field surveys in the Western Indian Himalaya for my doctoral research at the Wildlife Institute of India with a collaboration at the Water Research Institute, Cardiff University. I investigated how morphological traits of birds and phylogenetic relatedness among them drive habitat affinities and community assembly along an elevation gradient of 3000 m along a headwater system of the Ganga. My research findings highlighted the tight congruence between bird morphology, feeding and breeding ecology with riparian habitat features thus establishing that habitat filtering played a major role in shaping local riverine bird assemblages in the Himalayan system. River specialist birds avoided river stretches affected by dams and impoundments, removal of native riparian vegetation, agricultural intensification and concretisation.

Riverine landscapes are characterized by landscape mosaics leading to faunal-habitat diversity relationship, environmental gradients that are exploited by complex life-cycle of organisms, supporting different trait combinations, corridor dynamics facilitating dispersal routes and a feedback loop between the organisms and the habitat element. Thus, rivers and their riparian zones present a unique context to study the effect of selective pressures in structuring species assemblages and discerning the key processes driving them. In these high energy linear systems, periodic inundation of the shoreline and adjacent terrestrial environments result in challenging living conditions. Relatively few bird species, around 70 species have specialised to thrive along the margins of streams and rivers. Thus, riparian systems offer promising setups to understand whether unrelated species which have evolved independently in different parts of the world but currently live under similar environmental constraints have evolved convergent adaptations to live in these unique environments.

For my upcoming endeavour, I will study the role of historical processes such as past climate and geographical isolation in the diversification or persistence of lineages and the interaction of niche-based processes like trait conservatism, competition, and environmental filtering as drivers of species assemblages in specialist riverine birds globally. The geographic context in which rivers formed, their topographic complexity and associated climatic and environmental associates are expected to play key roles in shaping riverine biodiversity patterns. I will use species distribution models supplemented with paleoclimatic surfaces to discern the role of past and present climatic events in structuring contemporary assemblage patterns in river specialist birds. Size, shape and colour play fundamental roles in organismal function and can thus be expected to have evolved to increase the fitness of organisms that are well-suited to their ecological niche. Physical characteristics, such as the light and acoustic environment, vary among habitats and influence how effectively different signals are broadcasted and perceived and are particularly important in riverine habitats. River bird communities will be assessed for convergence in plumage and song traits to understand their evolutionary distinctiveness and functional role.

Findings from this research can be explicitly used to pinpoint riverine areas that harbour unusually high numbers of phylogenetically isolated lineages and distinct functional traits, which warrant direct conservation actions. Further, this work will enable a scientific background to use this iconic guild of birds to appraise global change effects on rivers through cost-effective citizen science surveys while raising the conservation profile of a major ecosystem at risk.

I am currently based at the <u>University of Georgia</u> as a postdoctoral research associate, and work in a project aimed at designing colonial wading bird surveys in the state of Georgia, USA. I begin with my second postdoc funded by the <u>Marie Curie Postdoctoral Fellowship</u> this summer at the <u>University of Sheffield</u>. I continue to seek answers to my questions around adaptations in birds from different lineages that have specialised to thrive along different rivers of the world besides understanding their conservation challenges. I hope to contribute to river conservation in India by framing a sound framework to monitor riverine ecosystems and conserve them by devising conspicuous indicators of riverine health.

I fancy birds of all shapes, colours and sizes and wish to see as many I can in the wild in my lifetime. My key research interests are around community ecology, biogeography and macroecology. I travel for mountains, rivers and birds and write about them sometimes. I like to cook my own food and garden when the weather permits.







# **Members' Page**

# Membership Renewal

Requesting members whose membership ended last year or before but was extended until 2021 to kindly visit the page to renew it at the earliest. Those who became member last year (2021) will have their membership until one year from the date of registration.

Members can now choose between annual and term membership based on their interest.

Membership type	Tenure	Membership Fee (INR)
Student	Annual	1000
	Term (3 Years)	2500
Regular	Annual	2000
	Term (3 Years)	5000
Institutional	Annual	10000
	Term (3 Years)	25000

# Opportunities

XXVI IUFRO World Congress 2024 | Forests and Society towards 2050 Stockholm, Sweden | 23-29 June 2024

Internship | Insect Biosystematics and Conservation Lab, ATREE Find more here

PhD | Institute of Forest Ecology, Slovak Academy of Sciences Find more here

# To explore

FREE Specialized Course | Red List of Ecosystems for Assessors | IUCN

Start date: Anytime | Duration : 3-4 days | Find more <u>here</u>

FREE Course | Natural World Heritage | IUCN Academy

Start date: Anytime | Self-paced | Find more here

FREE MOOC | Conservation related multiple courses | IUCN

Find more at mooc-conservation.org

### Invitation to Contribute

The aim of IRALE Newsletter is to work as a medium of communication, reflecting IRALE activities, sharing grant, awards and employment opportunities, as well as share work carried out by the members through Members in Action column and Mini-Blogs. This is a kind invitation to contribute your thoughts and opinions as mini-blogs, articles, recently published research, field news, or photographs to the next newsletter issue. It will be published in June 2023. Every IRALE Newsletter issue is shared on IRALE website (www.irale.org), LinkedIn Page, IRALE WhatsApp Group, Facebook Page and through IALE Newsletter.

Please contact us until the 20.06.2023 at irale.info@gmail.com