



# PRIYA RANGANATHAN

## PHD CANDIDATE, ASHOKA TRUST FOR RESEARCH IN ECOLOGY AND THE ENVIRONMENT (ATREE)

I am a doctoral student designing a project to understand the ecohydrology and ecosystem services of Myristica swamps, a forested wetland of the Western Ghats of India. My interests lie in wildlife ecology, wetland ecology, urban ecology, and science communication.

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## WORK EXPERIENCE

### PhD Student

*Ashoka Trust for Research in Ecology and the Environment • Aug 2021 - present*

- Enrolled in the ATREE Academy for Conservation Science and Sustainability Studies
- Tentative thesis title: *Assessing the Ecohydrological Characteristics and Ecosystem Services of Freshwater Swamp Forests in the Central Western Ghats*
- Guides: Dr. Jagdish Krishnaswamy (IIHS, ATREE), Dr. G. Ravikanth (ATREE)
- Prakriti Research Fellow 2022

### Project Coordinator

*HCL Harit Lake Restoration Project • Feb 2022 - Sep 2022*

- Managed a, CSR-funded project to conduct a baseline assessment of Hennagara Lake in Anekal taluk, Bengaluru as a prelude to a long-term restoration of the same lake
- Conducted sampling of water quality, hydrology, and ecosystem services at the lake along with the research team
- Wrote grant reports and a final project report at the end of the project duration
- Managed stakeholder workshops and coordinated field efforts.

### Writing Mentor

*Scholastic India Young Writers' Academy • Aug 2021 - present*

- Mentors high school students across India in 10-day workshop series on elements of story writing and storytelling, culminating in a published anthology of short stories by the students with a mentor's note

### Founder, Co-Editor

*Youth For Nature Magazine • Jun 2020 - present*

- Youth For Nature is a free, digital kids magazine that aims to bring stories of India's natural landscapes, wildlife, and conservation heroes to the doorsteps of children around the world and especially across India
- Founded in 2020 June
- Currently managing a 5 person team of volunteers
- Publishes quarterly issues

### Bharatanatyam Instructor

*Nandanik Dance Academy. • Mar 2020 - Jul 2021*

- Choreographed and taught Bharatanatyam and folk dance routines to students of the dance academy

### Freelance Researcher

*with Nirupa Rao, National Geographic Explorer • Jun 2020 - Sep 2022*

- Authored Works: *Geological History of Myristica Swamps, Retracing the Past, Culture and Conservation in Myristica Swamps, Ecosystem Services of Swamp Forests*

## Research Associate

*Ashoka Trust for Research in Ecology and the Environment • Jan 2019 - Feb 2020*

- P.I.: Dr. Jagdish Krishnaswamy
- Gandak Conservation Project (CHANSE)- Assessing habitat suitability for the gharial (*Gavialis gangeticus*) and the Ganges River Dolphin in the Gandak River of the Ganges River Basin and creating a river routing model to simulate flows in the Gandak River given different conditions upstream
- Peer-reviewed publication on status and conservation of Myristica swamps of the Western Ghats

## Research Consultant

*Centre for Wildlife Studies • Nov 2017 - Dec 2018*

- Co-author of peer-reviewed publication
- Assessed human-wildlife interactions in a unique settlement straddling two premier tiger reserves in South India
- Used statistical analysis and field surveys to suggest local management strategies for officials to use when handling human-wildlife conflict in this settlement, given tribal rights and longstanding documents giving land use rights to this community despite forest protections by the government.
- Wrote grants for the research organization
- Helped design and pilot a conservation education programme (Wild Shaale) in schools around Nagarhole and Bandipur Tiger Reserves, KA

## Project Intern

*WWF-India • May 2016 - Dec 2016*

- Duties: monitoring tiger dispersal using camera trapping, range mapping, and pugmark identification; GIS mapping of wildlife corridors and land use change; managing a field team while conducting a research project
- Project: "Assessing Land Use Change and Wildlife Presence in the Banas-Sewti-Chambal Habitat Block, Ranthambhore Tiger Reserve"

## EDUCATION BACKGROUND

### Duke University

*Nicholas School of the Environment, Class of 2017*

- Specialized in Ecosystem Science and Conservation
- Teaching Assistant for graduate and undergraduate courses
- Treasurer of Student Association of Geospatial Analysts
- International Representative of Duke Conservation Society

### University of Pittsburgh

*Dept. of Geology, Class of 2015*

- Graduated with honors
- President of the university's Model United Nations team
- Dual major in B.A. Environmental Science and B.S. Biology
- Minor in Chemistry
- Certificates in Geospatial Analysis and South Asian Studies
- Study abroad in Mussoorie, India (2014 Summer) to study Indian geology, globalization, and human security

## SKILLS

### Languages

Hindi (fluent), English (fluent), Marathi (proficient), Tamil (intermediate), Kannada (intermediate)

### Field Techniques

camera trapping, bird point count, mist netting, radio-collaring, mark-recapture, water quality assessment tests, pugmark identification, line transects, wetland field skills, soil surveying, hydrology measurements, forest measurements, geological surveys, diet analysis utilizing scat assessment, pitfall traps, snake handling

### Analytic & Written Skills

remote sensing (QGIS, ENVI, Google Earth Engine), geospatial analysis (ArcGIS, QGIS), scientific writing, statistical analysis (R, STATA, PAST, Microsoft Excel), popular science writing

## ACCOMPLISHMENTS

- Awarded the Prakriti Research Fellowship 2022 to study the socio-economical relationships of local communities to swamp forests in Karnataka
- Interviewed by five news sources about my research
- Published 50 popular science articles in Indian news media since 2017
- Won the M. Krishnan Nature Writing Memorial Award 2023
- Earned my Senior Diploma in Bharatanatyam from the Hindustan Arts and Music Society, Kolkata in 2021
- Received an Honourable Mention in the Tom Howard/John H. Reid Fiction & Essay Contest 2021
- Received a Commendable Mention in the M. Krishnan Nature Writing Memorial Award 2021

## ACTIVITIES & HONORS

- Founder & Co-Editor, Youth for Nature Magazine
- Editor, ATREE Young Researchers' Network (AYRN)
- Writing Mentor, Scholastic-India's Young Writers Academy
- Nature Writing Instructor, Storytrails Inc, Chennai
- Nature Writing Instructor, Logicology, Nagpur, MH
- Guest Lecturer, NCBS (Freshwater Ecology course)
- Participated in certificate courses from Nature Conservation Foundation, Bangalore
- Teaching Assistant, Duke University
- Teaching Assistant, University of Pittsburgh
- President, Model United Nations, University of Pittsburgh, PA, USA

## PUBLICATIONS

### Scientific Papers:

- Ranganathan, P., Ravikanth, G., & Aravind, N. A. (2021). A review of research and conservation of *Myristica* swamps, a threatened freshwater swamp of the Western Ghats, India. *Wetlands Ecology and Management*, 1-19.
- Karanth, K.K. & Ranganathan, P. (2018). *Assessing human-wildlife interactions in a forest settlement in Sathyamangalam and Mudumalai Tiger Reserves*. *Tropical Conservation Science*, 11, 1940082918802758.
- Ranganathan, P. (2017). *The Effects of Land Use Change on Sympatric Carnivore Use of Wildlife Corridors in Ranthambhore Tiger Reserve, Rajasthan* – M.Sc. Thesis, Nicholas School of the Environment, Duke University

### Popular Science Publications:

- Feb. 14, 2023 - Biodiversity Hotspot: Walking Through Kalakad-Mundanthurai Tiger Reserve
- Feb. 1, 2023 – Sighting the Singalika (JLR Explore)
- Dec. 29, 2022 – Mass Flowering and Why Some Plants Bloom and Die Together (Mongabay India)
- Jul. 15, 2022 – The Thar Needs Restoration, and Greening is not the Solution (Hindustan Times)
- May 8, 2022 – Celebration of Intricacy (Deccan Herald)
- Dec. 2021 – An Unusual Friendship (Current Conservation)
- Sep. 2021 – The Terrific Triumvirate: Pawprints at Khandar Fort (Saevus Magazine)
- Jun. 2021 – Parched (The Bangalore Review)
- Jun. 10, 2021 – Nilgiri Tahr: Living on the Edge (Deccan Herald)
- May 15, 2021 – The Many Moods of the River Kabini (JLR Explore)
- Apr. 10, 2021 – Meeting the Marten (Saevus Blog)
- Apr. 07, 2021 – Spotting the Whistling Hunter (Deccan Herald)
- Feb. 02, 2021 – Restoring Urban Wetlands for a Brighter Future (Mongabay India)
- Dec. 03, 2020 – Dancing Towards Extinction: The Sangai and its Marsh Habitat (Jalaplavit magazine)

- Dec. 01, 2020 – Bandits, Badlands, and Biodiversity (Sanctuary Asia)
  - Nov. 13, 2020 – Ranganathittu: The Kaveri's Quiet Jewel (Current Conservation)
  - Oct. 23, 2020 – Protecting Karnataka's Myristica swamps key to survival of rare lion-tailed macaque (The News Minute)
  - Oct. 15, 2020 – How the worship of sacred freshwater swamps is helping preserve biodiversity in the Western Ghats (Scroll India)
  - Jul. 29, 2020 – Notes From a Field Ecologist (Conservation Optimism)
  - Jul. 27, 2020 – The Ethics of Using Drones in Wildlife Conservation and Monitoring (Conservation India) - co-authored with Arjun Kannan and Sminu T.V.
  - Jul. 01, 2020 – Biodiversity in Myristica Swamps (Jalaplavit magazine)
  - Jun. 28, 2020 – Reverse Zoonosis: When Humans Pass Diseases on to Animals (The Wire Science) - co-authored with Nobin R.M.
  - Jun. 11, 2020 – Near the Baghjan Blowout, Assam's Critical Wetland Habitat is Burning (The Wire Science)
  - Jun. 2, 2020 – Locusts Swarms in India: Millimeters in Size yet Millions in Number (Mongabay India)
  - May 31, 2020 – Saving Vultures (Conservation India)
  - May 28, 2020 – Amphibians in the Sundarbans: How mangroves protect coasts from tropical storms (The Wire Science)
  - Apr. 4, 2020 – Desert Carnival: Experiencing Rajasthan's Annual Pushkar Fair (AYRN Blog)
  - Feb. 8, 2020 – Rooting for RAMSAR Wetlands (Deccan Herald)
  - Feb. 5, 2020 – Why Adding More RAMSAR Wetlands is Beneficial to a Growing India (Conservation India)
  - Dec. 14, 2019 – India's Disappearing Grasslands (Deccan Herald)
  - Oct. 26, 2019 – One Last Dance: The Fate of Manipur's Dancing Deer (Conservation India)
  - Oct. 26, 2019 – Who will save the swamps? (Deccan Herald)
  - Oct. 11, 2019 – Gandikota (travel guide) (Nature in Focus)
  - Jul. 3, 2019 – Caging the Wild: Maharashtra Government Approves Building of Zoo in Aarey Milk Colony Forest Land (Conservation India)
  - Jun. 24, 2019 – Habitat loss and poaching threaten the survival of the elusive Nilgiri langur (The News Minute)
  - Jun. 1, 2019 – Monsoon Mountains: Field Notes from the Nilgiri Hills (Saevus Magazine)
  - May 21, 2019 – To Skin a Cat: An Amateur Biologist's First Autopsy (Wildlife Conservation Society-India Blog)
  - May 9, 2019 – All for the perfect tiger shot: Unregulated tourism and its effects on wildlife (The News Minute)
  - Mar. 26, 2019 – Life in the Hills: Anecdotes from the Garhwal Himalayas (Saevus Magazine)
  - Feb. 9, 2019 – A Bullet to the Lungs: Mumbai Set to Lose More Forest to High-Speed Railway Line (Conservation India)
  - Feb. 6, 2019 – Ghosts of the Chambal (Wild Canids Blog)
- ## Writing for Children:
- ### 2022:
- A Scientist, a Seed, and a Story of Survival
  - Why Do We Journal About Nature?
  - On a Nature Trail!
  - Snakes of Sea and Sky
  - The Secret Life of Coral
  - Spotting a Mermaid
  - Birding in the Big City
  - Forest of the Gods
  - Monkey See, Monkey Do!
- ### 2021:
- Dawn of the Panther
  - Passage to Safety
  - Wild Ungulates of the Himalayas
  - Rivers of Ice
  - Can You Find These Birds in Your City?
  - Mumbai Saves its Green Lungs!
  - Reviving a River
  - Walking with the Caretakers of the Forests
  - The Stork Sister
  - How India Came to Be: A Journey Through Time
- ### 2020:
- How to Become a Backyard Ecologist
  - The Unicorns of Kaziranga
  - Cavorting with Civets
  - Living with Wildlife: Coexistence or Conflict?
  - Leopards in My City

## CERTIFICATIONS

- Nature Writing for Children (2022)
- Stakeholder Engagement (2020)
- Species Distribution Modelling (2019)
- Geospatial Analysis (2015)
- South Asian Studies (2015)

## REFERENCES

### **Dr. Jagdish Krishnaswamy**

- Dean, School of Environment and Sustainability, Indian Institute for Human Settlements (IIHS)
- Adjunct Senior Faculty, ATREE
- Email: jkrishnaswamy@iihs.ac.in

### **Dr. G. Ravikanth**

- Senior Fellow, ATREE
- Email: gravikanth@atree.org
- Ph. 091-080-23635555 (110)

### **Dr. Krithi K. Karanth**

- Chief Conservation Scientist & Director, Centre for Wildlife Studies (CWS)
- Email: krithi.karant@cwsiindia.org

### **Dr. Dean Urban**

- Professor of Landscape Ecology, Nicholas School of the Environment, Duke University
- Email: deanu@duke.edu