

Ramya Roopa .S.

School of BioSciences, The University of Melbourne

[Website](#) | [Email](#) | [Google Scholar](#) | [GitHub](#)

Education

Doctor of Philosophy - Science

2026 - 2030

The University of Melbourne

Erasmus Mundus-International Master in Applied Ecology

2016 - 2018

Federal University of Rio Grande do Sul, Brazil (third and fourth semester)

University of Coimbra, Portugal (second semester)

University of Poitiers, France (first semester)

Thesis: Occupancy and habitat associations of the endangered sand lizard *Liolaemus arambarensis* in the Restingas of southern Brazil

Supervisors: Prof. Laura Verrastro and Prof. Márcio Borges-Martins

GPA: 4.65/5

Bachelor of Science in Environmental Science

2012 - 2015

Fergusson College (affiliated to Savitribai Phule Pune University), Pune

Score (three-year total): 83.06 %

Work Experience

Data Analyst and Project Lead, Freshwater Turtle Research

July, 2022 – March, 2026

Riverine Ecosystems and Livelihoods Programme, Wildlife Conservation Trust

- Lead and conduct ecological surveys of freshwater turtles using boat-based methods, environmental DNA (eDNA), and unmanned aerial vehicles
- Analyze long-term trends in occupancy and abundance of endangered riverine fauna at local and regional scales
- Conduct spatio-temporal analysis of nesting and basking habitat for turtles, river morphology, riparian land use and climate data
- Develop web applications and dashboards for visualization of long-term hydrological and ecological data using R and Google Earth Engine (please refer 'Software' section)
- Conduct workshops on data management and analysis tools for field team and forest department; mentor interns and students working with the programme

Co-Lead, Analyst Team

July, 2020 - June, 2022

Counter Wildlife Trafficking Programme, Wildlife Conservation Society-India

- Co-lead collection of wildlife crime data, analysis (using social network analysis and qualitative crime intelligence frameworks) and dissemination of intelligence reports for law enforcement agencies; collaborated with WCS teams of Southeast Asia and China on specific research reports
- Mentored researchers from the monitoring and evaluation, and legal teams of the Counter Wildlife Trafficking Programme, in developing research projects, policy documents and technical reports
- Collaborated with data science and tech organizations, and developed proposals to automate parts of the data collection pipeline

Analyst

May, 2019 - June, 2020

Counter Wildlife Trafficking Programme, Wildlife Conservation Society-India

- Collected and analysed primary and secondary wildlife crime data to produce intelligence reports for law enforcement agencies
- Developed training content for law enforcement agencies

- Conducted a research project to evaluate the use of aquatic insects as bio-indicators of stream ecosystem health (**funded by World Wide Fund for Nature (WWF), India Small Grants Programme**)
- Submitted regular reports to Kalinga Foundation, the funding agency and the forest department
- Mentored volunteers and interns and presented research findings to campers and visitors to the field station
- Designed posters on identification and life cycle of aquatic insects

Peer-Reviewed Publications

Ramya Roopa, S., Brack, I.V, Freire, M.D., Santos, V., da Silva Menezes, L., Martins, M.B., & Verrastro, L. (2026). Trees, grass and sand grain size influence occupancy of an endangered and endemic sand lizard (*Liolaemus arambarensis*) of southern Brazil. *Herpetologica*, 82(1), 1-9.

<https://doi.org/10.1655/Herpetologica-D-25-00009>

Ramya Roopa, S., Chaudhuri, A., Dey, S., & Mendiratta, U. (2025). Calipee trade: a pervasive yet under-recognized threat to softshell turtles in South Asia. *Chelonian Conservation and Biology*, 23(2), 153–160.

<https://doi.org/10.2744/CCB-1636.1>

Ramya Roopa, S., Mendis, A., Sultan, N., Shukla, S., Chaudhuri, A., & Mendiratta, U. (2024). From pets to plates: network analysis of trafficking in tortoises and freshwater turtles representing different types of demand. *Oryx*, 58(1), 78–89. <https://doi.org/10.1017/S0030605323000376>

Aditya, V., Goswami, R., Mendis, A., & **Ramya Roopa, S.** (2021). Scale of the issue: Mapping the impact of the COVID-19 lockdown on pangolin trade across India.

Biological Conservation, 257, 109136. <https://doi.org/10.1016/j.biocon.2021.109136>

Sagar, H. S. S. C., Mabano, A., **Ramya Roopa, S.**, Sharmin, M., Richard, F.J., & Clause, J. (2019). India in the Oil Palm Era: Describing India's Dependence on Palm Oil, Recommendations for Sustainable Production, and Opportunities to Become an Influential Consumer.

Tropical Conservation Science, 12. <https://doi.org/10.1177/1940082919838918>

Ramya Roopa, S., Selvakumar, C., Subramanian, K. A., & Sivaramakrishnan, K. G. (2017). A new species of *Prosopistoma* Latreille, 1833 and redescription of *P. indicum* Peters, 1967 (Ephemeroptera: Prosopistomatidae) from the Western Ghats, India. *Zootaxa*, 4242(3), 591-599.

<https://doi.org/10.11646/zootaxa.4242.3.10>

Technical Reports and Preprints

Ramya Roopa, S. & Kelkar, N. (2024). FLOWIDER 1.0: a web-based interface to track flood-season water levels of large rivers of India's Gangetic plains. *EarthArxiv*. <https://doi.org/10.31223/X5NM41>

Mendis, A., Nikita, V.M., **Ramya Roopa, S.**, Sultan, N., Shukla, S., Lewis, R., Deshpande, K., Balaji, K., Karve, A., & Mendiratta, U. (2021). Media-reported wildlife poaching and illegal trade in India: 2020.

Wildlife Conservation Society-India Report. <https://doi.org/10.19121/2021.Report.40773>

Software

- **FLOWIDER 1.0: Flow and Water Level (FLOW) Integrated Datasets (ID) for Ecological studies of Rivers (ER)**. R Shiny App (link [here](#))
- **Ganges River Dolphin Population Tracker: Bihar**. R Shiny App (link [here](#))

Conference Presentations and Invited Talks

- **Ramya Roopa, S.**, Chaudhuri, A., Dey, S., & Mendiratta, U. (2026). Trade in Calipee: A Pervasive Yet Under-recognized Threat to Softshell Turtles in South Asia. *International Conference on Integrated Conservation of Asian Turtles (ICAT2026), Hong Kong (Received Travel Grant)*
- **Ramya Roopa, S.**, Mendis, A., Sultan, N., Shukla, S., Chaudhuri, A., & Mendiratta, U. (2023). Dissecting illegal turtle trade in India: Network analysis reveals differences in patterns of illegal trade according to type of demand. *Association for Tropical Biology and Conservation (ATBC) Annual Meeting, Coimbatore, India (Received ATBC Global Support Grant)*
- **Ramya Roopa, S.**, Mendis, A., Sultan, N., Shukla, S., Chaudhuri, A., & Mendiratta, U. (2021). Where did the turtles go? A network approach towards identifying key nodes in the trafficking of Indian star tortoises and softshell turtles. *International Congress for Conservation Biology* (online)
- **Ramya Roopa, S.** (2020). Piecing it together: Understanding Wildlife Crime through Open-Source Intelligence (OSINT). *Kalinga Centre for Rainforest Ecology* (online)
- **Ramya Roopa, S.**, & Mendis, A. (2019). Connecting the Dots: Counter Wildlife Trafficking using AI. *AI for Social Good, Google Research, India*

Popular Articles

Ramya Roopa, S. (2021). Of Pets, Delicacies and Calipee. *Planet Untamed*, 2.2, 38-43.

https://www.planetuntamed.asia/files/ugd/a9a8d0_69d1a9d9cb124e12aed355d536d4e7d4.pdf

Ramya Roopa, S., & Mendis, A. (2019). Under Cover: Orange-bellied Leafbirds as Pets in Nongriat Village, Meghalaya. *Conservation India*.

<https://www.conservationindia.org/gallery/under-cover-orange-bellied-leafbirds-as-pets-in-nongriat-village-meghalaya>

Awards and Grants

- Melbourne Research Scholarship (39,500 AUD per year) for 3.5 years
- Travel grant of HK\$ 8,000 received for presenting at International Conference on Integrated Conservation of Asian Turtles (ICAT2026), Hong Kong
- Global Support Grant, Association for Tropical Biology and Conservation (ATBC), 2023 (250 USD)
- Scholarship at Federal University of Rio Grande do Sul, Brazil, 2018 (1,330 USD)
- Erasmus+ Scholarship, 2017 (600 euros)
- World Wide Fund for Nature (WWF), India Small Grants Programme, 2014 (currently known as Conservation Catalyst Programme) (INR 80,080)

Service and Professional Memberships

- **Journal Reviewer:** *Oryx, Chelonian Conservation and Biology*
- Member of the Ecological Society of America (ESA) (2024 - Present)
- Member of the International Association for Vegetation Science (IAVS) (2024 - 2027)
- Member of the Association for Tropical Biology and Conservation (ATBC) (2023 - 2024)
- Member of the Society for Open, Reliable, and Transparent Ecology and Evolutionary Biology (SORTEE) (2023 - 2024)
- Member of The Netherlands Society for Statistics and Operations Research (VVSOR) (2021 - Present)

Skills

- **Statistical analysis:** R (hierarchical models; Bayesian statistics; generalized linear/linear mixed models; non-linear regressions; time-series analysis; social network analysis); NetLogo (agent-based modelling); IBM's i2 (social network analysis)
- **Web application development:** R (using shiny) and Google Earth Engine
- **GIS and geospatial analysis:** Google Earth Engine, ArcGIS Pro, and QGIS
- **Lab skills:** DNA extraction, Primer design, PCR, Gel electrophoresis

- **Certified drone pilot** (category: rotorcraft, sub-category: remotely piloted aircraft systems)
- **Languages:**
 - English: TOEFL score: 116/120 (Reading: 29, Listening: 30; Speaking: 30, Writing: 27)
 - Portuguese: Basic written and spoken
 - Hindi: Written and spoken
 - Tamil: Native