

Karthik Thrikkadeeri

PHD STUDENT, MONTAÑO LAB

Louisiana State University, USA

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Personal Information

Date of Birth: 24 March 1999

Sex: Male (he/him)

Nationality: Indian

Driving Licence: LMV & MCWG (India), Class E (USA)

Languages: English, Malayalam (native), Hindi

INTERESTS

- Ecological research (community ecology, macroecology, biogeography)
- Data analysis and visualisation (**fun data projects**)
- Birdwatching (**eBird profile**)
- Poetry and creative non-fiction writing
- Hip-hop

Education

DEGREES

PhD, Biological Sciences (ongoing)

Louisiana State University

Baton Rouge, US

2025--present

- Division: Systematics, Ecology and Evolution
- Supervisor: Flavia Montaña-Centellas

MSc, Ecology

University of South Bohemia

České Budějovice, CZ

2019--21

- Thesis: "Habitat selection in post-breeding temperate forest birds"
- Supervisor: Kateřina Sam

BSc, Biotechnology, Chemistry, Zoology

Christ University

Bengaluru, IN

2016--19

COURSES/WORKSHOPS

Introduction to Remote Sensing using QGIS

Azim Premji University

Bengaluru, IN

21--25 Nov 2022

- Basic principles of remote sensing, characterising different features of land surface, generating maps with land cover statistics

Certifications

English CEFR C2

IELTS (Academic)

2023

- Listening: 9.0; Reading: 9.0; Writing: 7.5; Speaking: 8.0; Overall Band Score: 8.5.

All-India Topper, Ecology and Evolution (EY)

Graduate Aptitude Test in Engineering (GATE)

2023

- Marks: 84.33; Score: 1000.

English CEFR C2

- Listening: 9.0; Reading: 9.0; Writing: 7.0; Speaking: 8.0; Overall Band Score: 8.5.

Awards

Rector's Award

České Budějovice, CZ

University of South Bohemia, 25 May 2021

2021

- CZK 2,500 (~€100), for outstanding results in study

Graduate study Merit Scholarship

České Budějovice, CZ

University of South Bohemia, Oct 2020--May 2021

2021

- CZK 1,500 (~€60) awarded per month for 10 months in second year of study
- Scholarship of the Ministry of Education, Youth and Sports

Publications

RESEARCH ARTICLES

1. A Viswanathan, **K Thrikkadeeri**, et al. (2025). State of India's Birds 2023: A framework to leverage semi-structured citizen science for bird conservation. *Ecosphere* 16(7). DOI: <https://doi.org/10.1002/ecs2.70290>
2. **K Thrikkadeeri** & A Viswanathan (2024). Despite short-lived changes, COVID-19 pandemic had minimal large-scale impact on citizen science participation in India. *Ornithological Applications* 126(4). DOI: <https://doi.org/10.1093/ornithapp/duae024>
3. **K Thrikkadeeri**, ..., A Viswanathan (2024). Birdwatchers piecing together Locustella jigsaw: Insights on the wintering distribution of the cryptic West Himalayan Bush Warbler *Locustella kashmirensis*. *Indian BIRDS* 20(3).
4. L Schillé, ..., **K Thrikkadeeri**, et al. (2024). Latitudinal gradient in avian insectivory: complementary effects of climate, habitat and bird diversity. *Journal of Biogeography* 51(6). DOI: <https://doi.org/10.1111/jbi.14808>
5. J Praveen, ..., **K Thrikkadeeri**, et al. (2022). Kerala Bird Atlas 2015–20: features, outcomes and implications of a citizen-science project. *Current Science* 122(3).

SOFTWARE

1. **K Thrikkadeeri** (2024). *skimr: Working with eBird data made easy*. R package version 0.0.0.9005. URL: <https://rikudoukarthik.github.io/skimr/>

REPORTS

1. **SoIB** (2023). *State of India's Birds, 2023: Range, trends, and conservation status*. The SoIB Partnership. Pp. 119. DOI: <https://doi.org/10.5281/zenodo.11124590>

BOOKS

1. PU Antony, ..., **K Thrikkadeeri**, et al. (2018). *Butterflies of Christ University Main Campus—A Pictorial Guide*. Centre for Publications, Christ University, Bangalore, India.

IN PIPELINE

1. **K Thrikkadeeri** and A Viswanathan (*in prep.*). No evidence at large scale for “return” of bird life in the Indian anthropause.
2. **K Thrikkadeeri**, I Freiberga, LR Jorge, K Sam (*in prep.*). Post-breeding birds dynamically track habitat structure over the season in a Central European forest.
3. **K Thrikkadeeri**, ..., G Shahabuddin (*in prep.*). A checklist of butterflies from a land-use intensification gradient in Kumaon Himalayas.

Skills

FIELD

- Point counts, line transects, all-out/opportunistic search
- Sound recording (birds), telephoto photography (birds), macro photography
- Camera trapping, PCQ vegetation sampling, radio telemetry
- Excellent sight and sound ID of birds (India, Europe)

- Extensive field experience in diverse and challenging landscapes, habitats and terrains

TECHNICAL

- Quantitative ecology and research design
- Data curation, management, processing and wrangling
- Reproducibility, version control and transparency in research workflows
- Copy editing and proofreading (English)

SOFTWARE

- R, R/Quarto Markdown & allies, Git/GitHub, QGIS
- ChatGPT, Bard
- Audacity, MS Office, Google Suite, Canva, ImageJ

PERSONAL QUALITIES

- Ambitious, patient, persistent, self-motivated, time management skills

Work Experience

Louisiana State University

Graduate Assistant

Baton Rouge, US

Jan 2025--present

Nature Conservation Foundation

Senior Research Assistant

Bengaluru, IN

Apr 2023--Dec 2024

- SoIB 2023: Contributed to analysis, visualisation and writing for two chapters (large-scale trends, systematic monitoring) of report, and also produced website-specific outputs
- SoIB 2023: Unified various analyses into pipeline framework, and functionised/parametrised scripts and added annotations, to improve accessibility to team as well as others
- SoIB 2023: Cleaned, structured and organised GitHub repository to archive
- SoIB 2023: Contributed to editing and proofreading as well as bibliography management for the full report
- Created an R package 'skimr' for functions used repeatedly when working with eBird data in R in the Indian context
- Created a Shiny app based on eBird API that allows the user to generate a summary of the eBirding that happened in a given administrative unit on a given date(s)
- Created a GitHub repository to collate mapping data useful for eBird data analysis in the Indian context---mostly contains open shapefiles of administrative units

Nature Conservation Foundation

Research Assistant

Bengaluru, IN

Aug 2021--Mar 2023

- Analysed the effect of the COVID-19 pandemic on birdwatching and eBird data in India, and its implications for research using this data; wrote up and submitted manuscript to a peer-reviewed journal
- Established a version control (Git/GitHub) workflow for Bird Count India analyses to enable reproducibility as well as transparency
- Created a periodic analysis framework to identify and track regions in India that are most underrepresented in eBird data, in order to identify regions of priority where concerted action (strategised from these metrics) is required
- Created eBirding point maps for the country as well as for each state in India, made easily accessible to users and updated monthly
- Automated several periodically occurring data analysis tasks of Bird Count India (tracking metrics, results of challenges & birding events [post-hoc from EBD and also live summaries using eBird API and R], etc.)
- Improved eBird data quality in India by creating updated and more fine-scale (district-wise) filters for Tripura state
- Assisted birders with their queries regarding eBird data and how to analyse it for their own studies

Biology Centre of the Czech Academy of Sciences

Part-time Employee

České Budějovice, CZ

Dec 2020--Feb 2021

- Collated Kateřina Sam's Papua New Guinea bird datasets spanning c. 4 years and uploaded to eBird

Biology Centre of the Czech Academy of Sciences

Part-time Employee

České Budějovice, CZ

Oct 2020

- Calculated herbivory damage from images of collected leaves from Cameroon using ImageJ software

Centre for Ecology Development and Research (CEDAR Himalaya)

Kumaon, IN

- Studied butterfly diversity patterns across a land-use intensification gradient in oak-pine forests of Kumaon Himalayas

Agumbe Rainforest Research Station (ARRS)

Agumbe, IN

Research volunteer

Apr 2017--May 2017

- Assisted in field work and data entry for a project on breeding ecology of the Yellow-wattled Lapwing
- Additionally, learned basics of camera trapping, scale counting for snakes and PCQ vegetation survey

Teaching

COURSES

BIOL 1208 Introductory Biology Lab I

Baton Rouge, US

Louisiana State University

Jan 2025--May 2025

WORKSHOPS

Using R for analyses using eBird data: An introduction

Thrissur, IN

Kerala Bird Monitoring Meet (KBMM) 2024

Jun 2024

- Led c. 3 h crash course for c. 20 participants (birders) with assistance from Praveen J

Analysing eBird data with R

Thrissur, IN

Kerala Bird Monitoring Meet (KBMM) 2023

Jun 2023

- Led workshop for c. 20 participants (birders) with assistance from Praveen J

Introduction to Merlin and eBird tools

Silchar, IN

Assam University, Silchar

May 2022

- Assisted Mittal Gala in short outdoor training session for eight MSc Physics students
- Introduced features of Merlin Bird ID and eBird Mobile, and demonstrated practical usage
- Interacted with students on general queries about birds and birding

Bird monitoring and eBird

Lembucherra, IN

College of Agriculture, Lembucherra

May 2022

- Assisted Mittal Gala in indoor workshop for c. 40 participants (students and local birders)
- Provided technical assistance, coordination support, and ad-hoc engagement with audience

Presentations

2023: *Citizen Science at NCF Field Sites*. Presented with Mittal Gala. NCF Annual Meet 2023, Mysuru, IN.

2022: *The impact of the COVID-19 pandemic on birding and birds in India*. NCF Annual Meet 2022, Mysuru, IN.
(See slides or code)

2022: *The impact of the COVID-19 pandemic on birding and birds in India*. International Ornithological Congress 2022, online. (See slides or code)

2022: *The impact of the COVID-19 pandemic on bird monitoring in India* (poster). Bird Monitoring Symposium 2022, online.

2019: *Inventory of butterfly species along a land-use intensification gradient in moist temperate forest biome in Kumaon Himalayas*. Ecology Seminar, University of South Bohemia, CZ.

2018: *A study on avian diversity in an industrial area of the Palghat Gap*. National Seminar on Development and Ecological Sustainability: Issues in Emerging India (DESIEI) 2018, Bengaluru, IN.

Field Activities

Bird Surveys

IN

Volunteer data collector

2019--present

- Periyar Bird Survey (Jan 2023) in Periyar Tiger Reserve, Kerala (team lead)
- Attappady Bird Survey (Dec 2022) in Attappady, Kerala (team lead)
- Panna Bird Survey (Mar 2022) in Panna Tiger Reserve, Madhya Pradesh (team lead)
- Wet Season Survey of Kerala Bird Atlas (Jul 2019) in Silent Valley National Park, Kerala

Field research

Dudhwa, IN

Team member

Apr 2023

- Contributed to data collection and discussions during the Bengal Florican survey (part of the grassland monitoring project of The Habitats Trust) in Dudhwa--Pilibhit landscape, Uttar Pradesh

Expeditions

Betul, IN

Expedition member

Feb 2023

- Joined mini-expedition to survey the birds of Betul, an underbirded district in Madhya Pradesh

Other Activities

ORGANISATIONAL

North Wayanad Forest Division Bird Survey 2023

North Wayanad, IN

Organiser

Mar 2023

- Helped formulate survey methodology, and managed technical logistics (eBird as a tool) and data quality

National Seminar DESIEI 2018

Bengaluru, IN

Organiser, Editor

Dec 2018

- Member of symposium's Organising Committee
- Led editorial work including editing, proofreading, typesetting, and publishing of Abstracts book

VOLUNTEERING

eBird data analysis consultation, Bird Count India

Online

Office Hours

Dec 2022--Dec 2024

- Offered office hours consultation for individuals or groups on how to analyse eBird data (see <https://birdcount.in/analysis-consultation/>)

eBird data quality

Online

Regional Reviewer & Hotspot Editor

May 2022--present

- Regional Reviewer for Tripura, IN; Hotspot Editor for Tripura, In & Meghalaya, IN

Bird Monitoring Symposium 2022

Online

Volunteer

Apr 2022

- Managed session talks, Q&As and comments on Slack, as well as assisted participants with queries

NCF Annual Meet 2022

Mysuru, IN

Volunteer

Oct 2022

- MCd a session of talks

ADMINISTRATIVE

High-performance server administration

Bengaluru, IN

Coordinator

2022--24

- Coordinated usage of NCF High Altitude Programme's high-performance server among various interested parties, as well as its maintenance

Mentoring

- **Vyom Vyas:** Assisted in designing a behavioural study on the breeding ecology of Purple Sunbird

Referees

Dr Ashwin Viswanathan

Research Associate, Education and Public Engagement
Nature Conservation Foundation, Mysuru, India
Email: ashwinv@ncf-india.org

Dr Suhel Quader

Scientist, Education and Public Engagement
Nature Conservation Foundation, Mysuru, India
Email: suhelq@ncf-india.org

Praveen J

Scientist, Education and Public Engagement
Nature Conservation Foundation, Mysuru, India
Email: praveen.j@ncf-india.org

Mgr Katerina Sam, PhD

Head, Laboratory of Multitrophic Interactions
Biology Centre of the Czech Academy of Sciences, České Budějovice, Czech Republic
Email: katerinatvardikova@gmail.com

Dr PU Antony

Retired Professor, Department of Zoology
Christ University, Bengaluru, India
Email: antonypulahannan@gmail.com