

# Karthik Thrikkadeeri

#### SENIOR RESEARCH ASSISTANT

Nature Conservation Foundation, India

🛘 +91 8129116328 | 💌 rikudoukarthik@gmail.com | 🌴 kartrick.rbind.io | 🖸 rikudoukarthik

# **Personal Information**

DATE OF BIRTH 24 March 1999 Sex Male (he/him)

NATIONALITY Indian
MARITAL STATUS Unmarried

DRIVING LICENCE LMV & MCWG (India)

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**

## University of South Bohemia in České Budějovice

České Budějovice, CZ

MSc in Ecology 2019–2021

• Thesis: "Habitat selection in post-breeding temperate forest birds"

• Supervisor: Katerina Sam

Christ University Bengaluru, IN

BSc in Biotechnology, Chemistry, Zoology 2016–2019

## Courses/Workshops

Azim Premji University

Bengaluru, IN

INTRODUCTION TO REMOTE SENSING USING QGIS

21-25 Nov 2022

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

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

#### PERSONAL QUALITIES

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

# **Certifications**

2023 English CEFR C2: IELTS 2023 (Academic)

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

2023 All-India Topper: Ecology and Evolution (EY) | Graduate Aptitude Test in Engeering (GATE) 2023

Marks: 84.33; Score: 1000

2018 English CEFR C2: IELTS 2018 (Academic)

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

# **Work Experience**.

#### **Nature Conservation Foundation**

Bengaluru, IN

SENIOR RESEARCH ASSISTANT

Apr 2023-present

- · 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 'skimmr' 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**

Bengaluru, IN

RESEARCH ASSISTANT

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 [posthoc 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**

České Budějovice, CZ

PART-TIME EMPLOYEE

Dec 2020-Feb 2021

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

# **Biology Centre of the Czech Academy of Sciences**

České Budějovice, CZ

PART-TIME EMPLOYEE

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

RESEARCH INTERN

Apr 2018-May 2018

Apr 2017-May 2017

• 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

· 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

# **Publications**

#### **RESEARCH ARTICLES**

- 1. **K Thrikkadeeri** and A Viswanathan (2023). Birdwatchers' resilience to perturbation in India buffers citizen science from pandemic-induced biases. Preprint at *bioRxiv*: https://doi.org/10.1101/2023.12.11.571083.
- 2. L Schillé, ..., **K Thrikkadeeri**, et al. (2023). Latitudinal gradient in avian insectivory: complementary effects of climate, habitat and bird diversity. Preprint at *bioRxiv*: https://doi.org/10.1101/2023.01.19.524212.
- 3. 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).

#### **REPORTS**

1. **SolB 2023**. *State of India's Birds, 2023: Range, trends, and conservation status*. The SolB Partnership. Pp. 119. Available online: https://stateofindiasbirds.in/#soib\_report.

#### Воокѕ

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**, ..., A Viswanathan *(under review)*. Birdwatchers rapidly unravel the wintering distribution of the cryptic West Himalayan Bush Warbler (*Locustella kashmirensis*).
- 2. **K Thrikkadeeri** and A Viswanathan *(in prep.)*. No evidence at large scale for "return" of bird life in the Indian anthropause.
- 3. A Viswanathan, **K Thrikkadeeri**, et al. (*in prep.*). State of India's Birds 2023: A blueprint to leverage semi-structured citizen science for bird conservation.
- 4. **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.
- 5. **K Thrikkadeeri**, ..., G Shahabuddin (*in prep.*). A checklist of butterflies from a land-use intensification gradient in Kumaon Himalayas.

# **Presentations**

# CONTRIBUTED

2023 **Talk**: Citizen Science at NCF Field Sites. Presented with Mittal Gala.

NCF Annual Meet 2023, Mysuru, IN.

2022 **Talk**: The impact of the COVID-19 pandemic on birding and birds in India.

NCF Annual Meet 2022, Mysuru, IN. (See slides or code)

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

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

**Talk**: 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 Talk: 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.

# **Workshops**

## Analysing eBird data with R

Thrissur, IN

Jun 2023

KERALA BIRD MONITORING MEET (KBMM) 2023

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

#### Introduction to Merlin and eBird tools

Silchar, IN

• 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

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

# Field Activities

ASSAM UNIVERSITY, SILCHAR

**Bird Surveys** IN

2019-present VOLUNTEER DATA COLLECTOR

- 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

Feb 2023 EXPEDITION MEMBER

· 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

Dec 2018

Member of symposium's Organising Committee

REGIONAL REVIEWER & HOTSPOT EDITOR

• Led editorial work including editing, proofreading, typesetting, and publishing of Abstracts book

#### VOLUNTEERING

ORGANISER, EDITOR

## eBird data analysis consultation, Bird Count India

Online

Oct 2022

Office Hours

Dec 2022-present

May 2022-present

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 for Tripura, IN; Hotspot Editor for Tripura, In & Meghalaya, IN

**Bird Monitoring Symposium** Online

VOLUNTEER Mar 2023

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

**NCF Annual Meet** Mysuru, IN

VOLUNTEER

• MCd a session of talks

**Bird Monitoring Symposium** Online

Apr 2022 VOLUNTEER

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

#### ADMINISTRATIVE

COORDINATOR 2022-present

• Coordinated usage of NCF High Altitude Programme's high-end 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



# 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