

Etienne Henry

PhD Candidate - Migratory landbirds conservation



About me

My work focuses on the conservation of African Eurasian migratory landbirds. My research employs a diverse range of methodologies including tracking data and modeling techniques.

Contact

- i** <https://etienne-henry.github.io/>
- ✉** etienne.henry@cefe.cnrs.fr
- Github**
- 📞** +33 6 45 01 38 25
- ID** ORCID: 0009-0004-1802-0197
- 🚗** Driving License B

RESEARCH EXPERIENCE

2023-2026

PhD

Center for Functional and Evolutionary Ecology, CNRS

"Mobilising tracking data on African-Eurasian migratory birds to support conservation at the flyway scale."

- Supervisors: Ana Rodrigues (CEFE-CNRS, Montpellier), Inês Catry (CIBIO, Lisbon), in collaboration with BirdLife International, Cambridge UK.
- Outlines: This PhD research project aims to address the 3 following questions:

1. What are the drivers behind the decline of African-Eurasian migratory landbird populations?

2. How are migration patterns along the African-Eurasian flyway predicted to change in response to ongoing threats (climate change, land-use change...)?

3. Drawing from the previous results, what are the priority actions for the conservation of African-Eurasian migratory landbirds along the flyway?

📍 Montpellier, France

2022
6 months

2nd year Master project

📍 Leipzig, Germany

German Centre for Integrative Biodiversity Research, iDiv

"Modelling the probability of meeting IUCN Red List criteria to support reassessments"

- Supervisors: Victor Cazalís (iDiv), Moreno Di Marco & Luca Santini (Sapienza University)
- Activities: comparative bird extinction risk modelling; IUCN Redlist criteria calculation; collaboration with many conservationists and researchers from the sRedlist research group.

2021
5 months

1st year Master project

📍 Montpellier, France

Center for Functional and Evolutionary Ecology, CNRS

"Map the transfer of knowledge through citizen sciences: case study of amphibians on iNaturalist"

- Supervisors: Ana Rodrigues (CEFE-CNRS) & Marie-Morgane Rouyer (CEFE-CNRS)
- Activities: extraction of > 400,000 amphibian observations from the iNaturalist API; design of a survey for iNaturalist identifiers; link between observation identifications and identifiers.

2020
2 months

BSc project

📍 Paris, France

Center for Ecology and Conservation Sciences, MNHN

"Impact of the pollinator decline on the french common flora"

- Supervisors: Emmanuelle Porcher (CESCO-MNHN) Gabrielle Martin (CESCO-MNHN)
- Activities: botanical fieldwork, collection and analysis of data from the Vige-Flore citizen science programme

2019-2020
6 months
(1/5 time)

BSc project

📍 Paris, France

École Normale Supérieure Institute of Biology, CNRS

"*Phaeodactylum tricornutum* response to phosphate depletion and function of an antisens non-coding RNA"

- Supervisors: Maria Helena Cruz de Carvalho (IBENS-CNRS)
- Activities: genetic analysis on diatoms

Technical skills

R PROGRAMMING

- Manipulating and analysing very **large datasets** (e.g. > 400,000 iNaturalist observations), *tidyverse* philosophy.
- **Statistical analyses**
 - Frequentist:
Glmms, ordinal regression models, GAMs
 - Bayesian:
Linear regressions (*brms*)
- **Spatial analysis** (e.g., spatial autocorrelation, SDMs).
- **Visual representation** of data and results (e.g., packages *ggplot2*, *leaflet*).

GIS

- R, packages *sf*, *terra*
- **QGIS**

PYTHON PROGRAMMING

- **Algorithmic**

OFFICE

- Literate programming with **Quarto**
- **LaTeX**
- **MS Office** (Excel, Word, PowerPoint)

OPEN SCIENCE & REPRODUCIBLE RESEARCH

- Git and Github
- Pipeline optimization with targets

Languages

English – Working language

- 1-year exchange in Maryland (USA; junior year)
- 6 months using English as a working language in Leipzig (Germany; second-year Masters project).
- International collaborations (Germany, Portugal, Lisbon)
- Scientific publications.

French - Native language

SCIENTIFIC OUTCOMES

Publications

[1] **Henry E.G.**, Santini, L., Butchart, S. H. M. ..., Cazalais, V., Di Marco, M. (2024). Modelling the probability of meeting IUCN Red List criteria to support reassessments. *Global Change Biology*, 30, e17119. (<https://doi.org/10.1111/gcb.17119>).

[2] **Henry, E.G.**, Rouyer MM, Rodrigues A.S.L.,(in prep), Mapping the global transfer of biodiversity knowledge through citizen sciences: case study of amphibians on iNaturalist.

Talks

- 2025 [Student Conference on Conservation Science](#), Cambridge, England.
- 2024 [French Society of Ecology and Evolution Annual Meeting](#), Lyon, France.
- 2022 [sRedList Seminar](#), Leipzig, Germany.
- 2021 [British Ecological Society Annual Meeting](#), Liverpool, England.
- 2021 [Pollinéco Research Group Meeting](#), MNHN, Paris, France.

Poster

Henry, E.G., Rouyer M.M., Rodrigues A.S.L., 2021. *Mapping the global transfer of biodiversity knowledge through citizen sciences*, [Student Conference on Conservation Science](#), Cambridge, England

TEACHING

2024-2025

Université de Montpellier

- Biodiversity monitoring: 15h
1st year master students
- Protocol design, fieldwork and data analysis
- Ecosystem functioning: 22h
1st year master students
- Environmental management projects
- Evolution : 15h
2nd year bachelor students
- Introduction to evolutionary concepts
- Behavioural ecology: 22h
1st & 3rd year bachelor students
- x

2023-2024

University of Montpellier

- Evolution : 16.5h
2nd year bachelor students
- Introduction to evolutionary concepts
- Environmental management: 22h
2nd year master students
- Project design with local stakeholders
- Ecole Normale Supérieure de Lyon**
- Oral exam preparation : 3h
Agrégation preparatory classes
- Subject: Living organisms in soil
- CIRAD, CNRS**
- Monitoring biodiversity : 2h lecture
Conservation professional

Other Interests

EVENTS ORGANIZATION

- Active member of the conference "Ecology & Behaviour 2025" team.
 - Raise funds
 - Scientific programming
 - Abstract selection...
- Day of meetings to discuss bird migration between the CEFE and the Tour du Valat.
- 2019-2020: Confer'ENS ULM

TUTORING & INTERVENTIONS IN SCHOOLS

- 2023-2024: Tutoring via EMEMSIP, 21h
 - Preparation for national high school exam (Baccalauréat) in physics, chemistry and mathematics
- School interventions (11h)
 - Presentation of research projects, methodologies, and discussion of the academic path to research.

NATURALISM

- Birds: field work in Castro Verde, Portugal
 - Population monitoring of terrestrial migratory birds (*Coracias garrulus*, *Ciconia ciconia*, *Falco naumanni*)
- iNaturalist

EDUCATION

2022-2023**Agrégation preparatory classes****École Normale Supérieure de Lyon*****Life and Earth sciences***

- Following a one-year intensive course in biology, geology and pedagogy, I passed the Agrégation, a very competitive national examination to become a highly qualified professor to sixth-form and university students.
- **Ranked 7th** (out of >400 candidates)

2021-2022**2nd year Master Degree****National Museum of Natural History*****Conservation sciences***

- 2nd year Master degree with highest honors (**17.0/20**)
- Classes: biogeography & macroecology, biostatistics, population viability, socio-ecosystem functioning, GIS

2020-2021**1st year Master degree****École Normale Supérieure*****Ecology & Evolution***

- 1st year Master degree with highest honors (**16.6/20**)
- Classes: ecosystem functionning, evolutionary ecology, data analysis, biostatistics, modelling

2019-2020**BSc****École Normale Supérieure*****Life sciences***

- Bachelor's degree with honors (**15,84/20**)
- Classes: ecology, evolution, experimental ecology, biostatistics, programming

2017-2019**Preparatory classes****Champollion High School*****Life and Earth sciences***

- Two-year undergraduate intensive courses in Earth and Life sciences in preparation to the highly competitive exam for admission to the French "Grandes Écoles", leading to admission in the École Normale Supérieure (French highest ranked school in research).

2016-2017**1st year engineer school****EI Purpan agronomist school*****Agronomy***

- Top of the class (out of >200 students)

2015-2016**Senior year high school****Lycée Émilie de Rodat**

- Baccalauréat with « Great Honours » (**16.55/20**)

2014-2015**Junior year high school****Rising Sun High School**

- One year exchange student

📍 Lyon, France**📍 Paris, France****📍 Paris, France****📍 Paris, France****📍 Grenoble, France****📍 Toulouse, France****📍 Toulouse, France****📍 Maryland, United States****📍 Dordogne, France****📍 Toulouse, France**

WORK EXPERIENCE

**2017
3 months****Internship in a farm*****Maison Vilatte Plassard Pompongnac***

- Activities: extensive suckler cow farming activities, financial and strategic management of the farm, animal care (kennel) & catering

2016 & 2018**Clinical officer*****Ambroise Paré Hospital***

- Activities: room maintenance and health practices