



## Edouard Duquesne

**Passport:** GA7988745 **Nationality:** Belgian **Date of birth:** 27/05/1999

**Place of birth:** Brussels, Belgium **Phone number:** (+32) 0470303884

**Email address:** [edouarduq@gmail.com](mailto:edouarduq@gmail.com)

**Website:** <https://edouard-duquesne.com/>

**Work:** Avenue Franklin Roosevelt 50, 1050 Ixelles (Belgium)

### ABOUT ME

PhD researcher (PhD obtained on the 15th of December 2025 and with funding until 30/09/2026) with a strong interest in tropical ecology, tropical forests, and global change.

### WORK EXPERIENCE

 **Université libre de Bruxelles** – Brussels, Belgium

#### PhD researcher

[ 15/12/2025 – 30/09/2026 ]

 **Université libre de Bruxelles** – Brussels, Belgium

#### PhD student

[ 01/10/2022 – 15/12/2025 ]

FRIA grant from the FNRS (Fonds National de la Recherche Scientifique)

Thesis:

**Forecasting biodiversity under pressure: species distribution modeling of ecosystem engineers, pests, and bioindicators in the Anthropocene**

#### Skills acquired:

- **Research design and management:** Hypothesis formulation, sampling design, timeline management, budget and resource allocation, applying for grants for fieldworks, open access publications and conferences.
- **Teamwork:** group project, master students, local communities, networking.
- **Ecological and sampling methods:** transect design, quadrat sampling, specimen collection and preservation. Fieldwork across French Guiana, Guadeloupe, Costa Rica and Belgium.
- **Species identification:** morphological, anatomical and barcoding identification of termites.
- **Field logistics:** preparation, ABS research permit enquiry, working in remote and dangerous areas, equipment maintenance, GPS navigation, compass navigation.
- **Statistical and computational proficiency:** advanced R programming, big data manipulation, statistical modeling, machine learning, working with clusters.
- **Spatial analysis:** QGIS for geospatial data processing and mapping.
- **Communication skills:** manuscript preparation, peer review process, creating clear figures and graphics using R and Photoshop, oral presentations, teaching (classes, fieldwork and master students), social media science communication ([biotifulvie.be](http://biotifulvie.be))
- **Broad knowledge:** ecology, bioinformatics, global change, macroecology, conservation biology, invasive species, termites, bark and ambrosia beetles, sea turtles.

## EDUCATION AND TRAINING

---

### PhD in Sciences

*Université Libre de Bruxelles* [ 01/10/2022 – 15/12/2025 ]

City: Brussels | Country: Belgium | Website: <http://ulb.be/> | Field(s) of study: Natural sciences, mathematics and statistics: • Biology | Level in EQF: EQF level 8 | Thesis: Forecasting biodiversity under pressure: species distribution modeling of ecosystem engineers, pests, and bioindicators in the Anthropocene

### Master in Biology of Organisms and Ecology

*Université Libre de Bruxelles* [ 15/09/2020 – 04/07/2022 ]

City: Brussels | Country: Belgium | Website: <http://ulb.be/> | Field(s) of study: Natural sciences, mathematics and statistics: • Biology | Final grade: Magna cum laude | Level in EQF: EQF level 7 | Thesis: Analysis of the edge effect on termite communities in French Guiana

### Bachelor in Biological Sciences

*Université Libre de Bruxelles* [ 15/09/2017 – 29/06/2020 ]

City: Brussels | Country: Belgium | Website: <http://ulb.be/> | Field(s) of study: Natural sciences, mathematics and statistics: • Biology | Final grade: Cum laude | Level in EQF: EQF level 6

## LANGUAGE SKILLS

---

**Mother tongue(s):** French

**Other language(s):**

#### Dutch

LISTENING B1 READING B1 WRITING B1  
SPOKEN PRODUCTION B1 SPOKEN INTERACTION B1

#### English

LISTENING C2 READING C2 WRITING C2  
SPOKEN PRODUCTION C1 SPOKEN INTERACTION C1

#### Spanish

LISTENING B1 READING B2 WRITING B1  
SPOKEN PRODUCTION B1 SPOKEN INTERACTION B1

*Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user*

## CONFERENCES AND SEMINARS

---

[ 29/06/2025 – 03/07/2025 ] Oaxaca, Mexico

**Association for Tropical Biodiversity and Conservation 2025** Oral presentation (15 min) in English: Poleward migration of sea turtles: climate change, habitat loss and emerging threats.

[ 25/08/2024 – 30/08/2024 ] Kyoto, Japan

**International Congress of Entomology 2024** Oral presentation (15 min) in English: Predicting the distribution of highly invasive termites under climate change and increasing connectivity

[ 07/07/2024 – 11/07/2024 ] Lausanne, Switzerland

#### **European Congress for the International Union for the Studies of Social Insects 2024**

Oral presentation (15 min) in English: Distribution of the termite pest genus *Heterotermes*: an approach using SDMs and phylogeny

[ 15/10/2023 – 20/10/2023 ] Heraklion, Greece

#### **European Congress of Entomology 2023**

Oral presentation (15 min) in English: Forest edge effects on termites in a neotropical rainforest

Poster presentation (1h30) in English: Using socioeconomic variables and elevation in a species distribution modeling

to predict the distribution of invasive termites

[ 28/08/2023 – 30/08/2023 ] Toulouse, France

**International Union for the Studies of Social Insects - French Section (IUSI-SF) 2023** Oral presentation (15 min) in French: Effets combinés de la mondialisation, de l'urbanisation et du changement climatique sur la répartition de 12 espèces de termites envahissants en région Asie Pacifique  
Poster presentation (1h30) in English: Forest edge effect on termites in a neotropical forest

## PUBLICATIONS

---

[2025]

### **Climate change redefines sea turtle hotspots: vessel strike risks and protected areas gaps**

Authors: Edouard Duquesne, Denis Fournier | Journal Name: Science Advances | Volume, Issue and Pages: Vol. 11, Issue 26, eadw4495 | Publisher: American Association for the Advancement of Science

Duquesne, E., & Fournier, D. (2025). Climate change redefines sea turtle hotspots: Vessel strike risks and gaps in protected areas. *Science Advances*, 11(26), eadw4495. <https://doi.org/10.1126/sciadv.adw4495>

Link: <https://doi.org/10.1126/sciadv.adw4495>

[2025]

### **Urban and agricultural areas under threat of the termite pest genus *Heterotermes*: insights from species distribution modelling and phylogeny**

Duquesne, E., & Fournier, D. (2025). Urban and agricultural areas under threat of the termite pest genus *Heterotermes*: Insights from species distribution modelling and phylogeny. *Journal of Pest Science*, 1–22

Link: <https://doi.org/10.1007/s10340-025-01866-6>

[2024]

### **Expanded range of *Nasutitermes callimorphus* Mathews, 1977 (Isoptera: Termitidae: Nasutitermitinae), comparison with *N. corniger* (Motschulsky, 1855) and *N. ephratae* (Holmgren, 1910), and synonymy of *N. dasyopsis* Thorne, 1989 into *N. nigriceps* (Haldeman, 1854)**

Scheffrahn, R. H., Roisin, Y., Szalanski, A. L., Austin, J. W., & Duquesne, E. (2024). *Zootaxa*, 5507(1), 57-78.

[2024]

### **Connectivity and climate change drive the global distribution of highly invasive termites**

Duquesne, E., & Fournier, D. (2024). Connectivity and climate change drive the global distribution of highly invasive termites. *NeoBiota*, (92).

Link: <https://neobiota.pensoft.net/article/115411/download/pdf/1043732>

[2026]

### **Global biogeographic realm disruption by invasive termites: biotic homogenization and implications for biodiversity hotspots Under review**

Authors: Edouard Duquesne, Denis Fournier

Duquesne, E., & Fournier, D. (2026, under review). Global biogeographic realm disruption by invasive termites: biotic homogenization and implications for biodiversity hotspots. *Global Change Biology*.

[2026]

### **Global change and human pressures reshape the future of sea turtle nesting sites Under review**

Authors: Edouard Duquesne, Iona Pâques, Marion Steenacker, Denis Fournier

Duquesne, E., Pâques, I., Steenacker, M. & Fournier, D. (2026, under review). Global warming threatens the future of sea turtle nesting sites. *Biological Conservation*.

[2026]

### **Scolytinae's threats: host availability and climate change drive global risks of forest pests Under review**

Authors: Edouard Duquesne, Emilio Caiti, Denis Fournier

Duquesne, E., Caiti, E., & Fournier, D. (2023, under review). Scolytinae's threats: host availability and climate change drive global risks of forest pests. *Journal of Applied Ecology*

## **HONOURS AND AWARDS**

---

[ 08/09/2022 ] Université Libre de Bruxelles

**Andrée Schaak Award** The award was established by Andrée Schaak's mother in memory of her daughter, a biology graduate who died in 1975. This annual prize is awarded to the most deserving student in the MA2 class in biological sciences (specialization: animal biology). The student must adhere to the principle of free examination.

[ 30/06/2017 ] Athénée Robert Catteau

**Award in Physics** Award in Physics received during my last year of high school (just before going to University)

## **DRIVING LICENCE**

---

**Driving Licence:** AM

11/04/2018 – 11/04/2028

**Driving Licence:** B

11/04/2018 – 11/04/2028

## **VOLUNTEERING**

---

[ 01/07/2025 – Current ] Brussels

### **First aid volunteer - Red Cross Belgium**

First aid volunteer at the Red Cross Belgium (Brussels section: Watermael-Boitsfort).

[ 01/03/2024 – 30/06/2024 ] Brussels: Lycée Communal Emile Max

### **Tutor in Mathematics for high school students - ScholaULB**

Weekly tutoring for students in difficulties in mathematics (15-16 years old) with ScholaULB. Class of 3 to 7 students.

## **COMMUNICATION AND INTERPERSONAL SKILLS**

---

### **Biodiversity blog (in French)**

Personal blog in French with various articles about ecology, gardening, green banking/investments, biking, etc.

Also contains hundreds of animal (mainly insects) pictures with a complete description.

Link: <https://biotifulvie.be/>

### **Instagram account about Biodiversity (English and French)**

Instagram account showing pictures of hundreds of species from all around the world with description and reels about biodiversity and biological sciences.

Link: <https://www.instagram.com/biotifulvie/>