

Iain R. Moodie

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Profile

Citizenship: British

Residence: Sweden (permenant)

Language: English (native), Swedish (SFI C/D ongoing), British Sign Language (SCQF 3)

Education

Lund University, Sweden

since 2022

Doctoral Candidate (Biology)

- Thesis project (180 ECTS): *Integrating Evolutionary Concepts into Ecotoxicology*

University of Montpellier, France

2020–2022

M.Sc. Biodiversité, Ecologie et Evolution*

- M2 Master thesis (30 ECTS): *Meta-analysis of Sexual Selection in Angiosperms*
- M2 Master thesis (30 ECTS): *Cognitive Biases Shape Sexual Signals in Darter Fishes*
- M1 Master thesis (15 ECTS): *Experimental Evolution of the Temperature Niche*
 - Published in *Evolution*

Uppsala University, Sweden

2020–2022

M.Sc. Biology*

University of Stirling, Scotland

2016–2020

B.Sc. (Hons) Animal Biology (First Class)

- Honours thesis (60 ECTS): *Fungal biopesticide induced anorexia in *Helicoverpa armigera**
- Exchange semester at *Gothenburg University, Sweden*

*Double degree obtained as part of the Mobility European Master Programme in Evolutionary Biology (MEME)

Publications

Peer-reviewed articles

4. Zilio, G.*, **I. R. Moodie***, S. P. Malusare*, M.-A. Devillez, J. Givens, C. Gougat-Barbera, and E. A. Fronhofer. **2026**. The evolution of Thermal Performance Curves and life-history traits in responses to thermal selection. *Evolution*.
3. Ruzicka, F.*, M. K. Zwoinska*, D. Goedert, H. Kokko, X.-Y. Li Richter, **I. R. Moodie**, S. Nilén, C. Olito, E. I. Svensson, P. Czuppon, and T. Connallon. **2025**. A century of theories of balancing selection. *Biological Reviews*.
2. Ivimey-Cook, E. R.*, A. Sánchez-Tójar*, I. Berberi, A. Culina, D. G. Roche, R. A. Almeida, B. Amin, K. R. Bairos-Novak, H. Balti, M. G. Bertram, L. Bliard, I. Byrne, Y.-C. Chan, W. R. Cioffi, Q. Corbel, A. D. Elsy, K. R. N. Florko, E. Gould, M. J. Grainger, A. E. Harshbarger, K. A. Hovstad, J. M. Martin, A. R. Martinig, G. Masoero, **I. R. Moodie**, D. Moreau, R. E. O'Dea, M. Paquet, J. L. Pick, T. Rizvi, I. Silva, B. Szabo, E. Takola, E. S. J. Thoré, W. C. E. P. Verberk, S. M. Windecker, G. Winter, Z. Zajková, R. Zeiss, and N. P. Moran. **2025**. From policy to practice: progress towards data- and code-sharing in ecology and evolution. *Proceedings of the Royal Society B: Biological Sciences*.

* Shared first-authorship

1. Noble, D. W. A., Z. A. Xirocostas, N. C. Wu, A. R. Martinig, R. A. Almeida, K. R. Bairos-Novak, H. Balti, M. G. Bertram, L. Bliard, J. A. Brand, I. Byrne, Y.-C. Chan, D. J. Clink, Q. Corbel, R. A. Correia, J. Crawford-Ash, A. Culina, E. D’Bastiani, G. G. Deme, M. de Souza Leite, F. Dhellemmes, S. Dimri, S. M. Drobniak, A. D. Elsy, S. E. Everingham, S. J. L. Gascoigne, M. J. Grainger, G. C. Hossack, K. A. Hovstad, E. R. Ivimey-Cook, M. L. Jones, I. Kačergytė, G. Küstner, D. C. Leibold, M. M. Mair, J. Martin, A. Mizuno, **I. R. Moodie**, D. Moreau, R. E. O’Dea, J. A. Orr, M. Paquet, R. Parajuli, J. L. Pick, P. Pottier, M. Purgar, P. Recio, D. G. Roche, R. Royauté, S. Shafiei Sabet, J. M. G. Segovia, I. Silva, A. Sánchez-Tójar, B. E. Soares, B. Szabo, E. Takola, E. S. J. Thoré, B. Timilsina, N. E. van Dis, W. C. E. P. Verberk, S. J. G. Vriend, K. H. Wild, C. Williams, Y. Yang, S. Nakagawa, and M. Lagisz. **2025**. The promise of community-driven preprints in ecology and evolution. *Proceedings of the Royal Society B: Biological Sciences*.

Pre-prints

2. Parker, T. H., D. Roche, R. E. O’Dea, E. Ivimey-Cook, M. Purgar, K. Gahm, E. Gould, M. Paquet, J. Tariel-Adam, A. Fredston, C. John, B. Amin, D. R. Angelini, L. J. Bartlett, S. Burke, A. Culina, S. Drobniak, H. L. Dugdale, S. Flaman, N. J. Gownaris, M. Grainger, F. Hillemann, M. Ihle, S. Issar, S. Kelleher, C. D. Kelly, R. Krasnow, B. L. Long-Fox, **I. R. Moodie**, S. Nakagawa, D. W. A. Noble, J. L. Pick, N. E. van Dis, S. J. G. Vriend, O. Wilson, M. G. Bertram, E. Fernández-Juricic, I. Kačergytė, P. Pottier, A. Sánchez-Tójar, A. C. Tan, B. C. Wintle, and M. Lagisz. **2026**. SORTEE five years on: taking stock of the Society for Open, Reliable, and Transparent Ecology and Evolutionary biology. *EcoEvoRxiv*

Submitted for recommendation at Peer Community In (PCI)

1. Gomez-Llano, M., S. Nilén, **I. R. Moodie**, and E. I. Svensson. **2021**. Sexual conflict promotes species coexistence through negative frequency dependence. *bioRxiv*.

Other publications

1. **Moodie, I. R. 2025**. What ratio of sons to daughters should you have? *American Society of Naturalists Blog*.

Presentations

Invited presentations

In which the organising committee of an event invited me to give a presentation.

2. **Moodie, I. R. 2024**. Evolutionary Perspectives on Species’ Responses to Toxicants. *Biology Research Seminar Series, Karlstad University, Sweden. (30 mins)*
1. **Moodie, I. R. 2024**. The need for open, reliable and transparent data in ecology and evolution. *Zootis-DEEP symposium, Stockholm University, Sweden. (45 mins)*

Contributed presentations

In which I applied and was selected to give a presentation.

8. Zilio, G., **I. R. Moodie**, S. P. Malusare, M. Devillez, J. Givens, C. Gougat-Barbera, E. A. Fronhofer. **2026**. The evolution of thermal performance curves and life-history traits in responses to thermal selection. *Animal health, reproduction and survival in the age of humans, Lund, Sweden. (15 mins)*
7. **Moodie, I. R.** and S. P. De Lisle. **2025**. The Tempo and Mode of Toxicant Sensitivity Evolution. *Congress of the European Society for Evolutionary Biology, Barcelona, Spain. (Poster)*

6. **Moodie, I. R.** and S. P. De Lisle. **2025.** The Tempo and Mode of Toxicant Sensitivity Evolution. *Evolution in Sweden, Linköping, Sweden. (Poster)*
5. **Moodie, I. R.** and S. P. De Lisle. **2024.** The Mode of Toxicant Sensitivity Evolution. *Biology in Lund Annual Meeting, Lund, Sweden. (Poster)*
4. **Moodie, I. R.** and S. P. De Lisle. **2023.** What can Ecotoxicology gain from a Macroevolutionary Lens? *Biology in Lund Annual Meeting, Lund, Sweden. (5 mins)*
3. **Moodie, I. R.,** P. David, T. Janicke, F. Rousset, J. Tonnabel. **2022.** Is sexual selection widespread across angiosperm species? *Congress of the European Society for Evolutionary Biology, Prague, Czech Republic. (10 mins)*
2. **Moodie, I. R.,** T. C. Mendelson, J. P. Renoult. **2022.** The Influence of Habitat on the Pattern of Sexual Signals in Darters. *ASN/SSB/SSE Evolution Conference, Cleveland, USA. (Virtual attendance due to COVID-19, 12 mins)*
1. **Moodie, I. R.,** S. Malusare, M. Devillez, C. Gougat-Barbera, E. A. Fronhofer. **2021.** Experimental Evolution of the Temperature Niche. *Virtual ASN/SSB/SSE Evolution Conference. (Virtual attendance due to COVID-19, 8 mins)*

Software

Software packages of which I am the main contributor/maintainer.

ceRvus

since 2022

10.5281/zenodo.17968976

- R package for interacting with the parentage analysis software Cervus

Course materials

Any learning materials that I have developed are open, free, citable, and CC BY-SA 4.0 licensed.

Experimental design and analysis for biologists

last updated May 2026

irmoodie.com/biob11 | 10.5281/zenodo.20288240

- Complete materials for a 5 week long data analysis and experimental design course that uses R, the tidyverse and tidymodels.

Introduction to statistics for ecologists

last updated May 2026

irmoodie.com/bioc13 | 10.5281/zenodo.20555181

- Two full day workshop that introduces statistical thinking, and equips ecology students to carry out basic data analysis using R.

Teaching

Organised by department.

Department of Biology, Lund University, Sweden

Reverse chronological order. Course level (or equivalent) given in brackets. VT = spring, HT = autumn.

BIOS14/15 - Processing and Analysis of Biological Data (Advanced)

HT24, HT26

- I give a guest lecture on data handling and data visualisation with tidyverse.

BIOC13 - Ecology (Basic)

VT25, HT25, VT26, HT26

Lecturer (statistics)

- I teach a two day long workshop on statistical methods using R.

BIOR69 - Population and Community Ecology (Advanced)

HT23, HT24, HT25, HT26

Teacher

- I teach a statistics workshop, a week long field course, and run literature seminars.

Programming with R for Biologists VT23, HT23, VT24, HT24, VT25, HT25, HT26

Course organiser

- I organise an extracurricular programming course each semester open to all students.

BIOB11 - Experimental Design and Analysis for Biologists (Basic) VT25, VT26

Course leader & main teacher

- I developed all materials and delivered a five week long modern experimental design, data analysis and computational statistics course that uses R.

BIOR83 - Conservation Biology (Advanced) VT26

Teaching assistant

- I helped students implement demographic models in R, and to use them to explore population dynamics and sustainable harvesting.

BIOS13 - Modelling Biological Systems (Advanced) HT24, HT25

Teaching assistant

- I helped students use maths and R simulations to model biological systems.

LTH, Faculty of Engineering, Lund University, Sweden

Reverse chronological order. Course level (or equivalent) given in brackets.

EXTG11/15 - Biology: Introductory Course for Engineers (Basic) VT26

Teacher

- I taught a workshop on genetic algorithms using python.

EXTQ20 - Biological Systems (Advanced) VT26

Teacher

- I taught workshops on genetic algorithms and population dynamics using MATLAB.

Other

Non-academia related teaching.

BSAC Ocean Diver & Sports Diver 2015–2019

Diving instructor

- I taught theory and practical diving lessons at multiple sub-aqua clubs in Scotland.

Professional service _____

Peer review since 2023

Journal of Animal Ecology

Society for Open, Reliable, and Transparent Ecology and Evolutionary biology 2024

Chair of Education & Outreach Committee

Society for Open, Reliable, and Transparent Ecology and Evolutionary biology 2023

Workshop & Webinar Coordinator

Department of Biology, Lund University 2023–2025

Weekly social evening organiser

Working groups _____

European Society for Evolutionary Biology Special Topic Network: Linking Local 2023

Adaptation and Sex Differences

Participant

Mentoring & Supervision

Ebba Wahlberg 2024

B.Sc. student at Lund University, Sweden

- *Thesis project: Vertical migration of cyanobacteria in the water column.*
- *Contribution: implementation and interpretation of linear mixed effects models.*

Sveva Frumento 2024

B.Sc student at Università degli Studi di Genova, Italy

- *Internship project: Local adaptation to coastal environments in *Ischnura elegans*.*
- *Contribution: research internship mentoring, lab experiments, co-authoring paper.*

Ada Behncké Serra 2023

M.Sc. student at Lund University, Sweden

- *Thesis project: Electron acceptors influence protist growth dynamics.*
- *Contribution: implementation of non-linear Bayesian models of population dynamics.*

Adriana María Echeverría Méndez 2022

B.Sc. graduate from Universidad del Valle de Guatemala, Guatemala

- *Career/study mentorship through Evolutionary Biology Crash Course program.*

Employment

Department of Biology, Lund University, Sweden since Sept 2022

Doctoral Candidate

Institut des Sciences de l'Évolution de Montpellier, CNRS, France Mar–Aug 2022

M2 Research Internship

Centre d'Ecologie Fonctionnelle et Evolutive, CNRS, France Sept 2021–Feb 2022

M2 Research Internship

Institute of Science and Technology Austria Jul 2021

Field Assistant (Barton Lab)

Institut des Sciences de l'Évolution de Montpellier, CNRS, France Apr–Jun 2021

M1 Research Internship

Department of Biology, Lund University, Sweden Jun–Aug 2018 & 2019

Research Internship (Svensson Lab)

The Co-operative Group, Scotland 2016–2018

Customer Team Member

Cromarty Firth Fishery Board, Scotland Jun–Aug 2014 & 2015

Research Assistant (Electrofishing and Habitat Surveying)

Grants, Scholarships & Awards

Erasmus Mundus Joint Master Degree Scholarship 2020

European Union scholarship to pursue a joint masters degree

49,000 EUR

John Muir Discovery Award 2015

Recognition of forest restoration volunteering