Camille LECLERC, PhD

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RESEARCH INTERESTS

Macroecology ; Biogeography ; Global Changes ; Conservation Biology

EDUCATION

2017 – 2019	PhD in biology, Doctoral School n°567 Plant Sciences: from genes to ecosystems University of Paris Saclay, Orsay, France
2010 – 2012	Master's degree in ecology, biodiversity and evolution, specialized in conservation biology University of Paris Sud, Orsay, France
2007 – 2010	Bachelor's degree in ecology University of Paris Sud, Orsay, France

RESEARCH EXPERIENCES

Mar. 2020 – to present	***Postdoctoral researcher*** at Risks, ECO-systems, Vulnerability, Environment, Resilience unit (UMR RECOVER), Aix-en-Provence. Supervised by Arnaud Sentis and Victor Frossard. *Food-web structure in relation to variations in the environment.*
Jan. 2017 – Dec. 2019 (36 months)	***PhD fellow*** at the Ecology, Systematic, Evolution unit (UMR 8079), Orsay. *Insular endemic biodiversity in the face of global change.* Ph.D. publicly defended the 10th of December, 2019. *Examination board:* *Pr. P. Leadley, Université Paris-Sud, ESE – UMR 8079, Orsay, France (President)* *Dr. V. Devictor, CNRS, ISEM – UMR 5554, Montpellier, France (Referee)* *Dr. A.S.L. Rodrigues, CNRS, CEFE – UMR 5175, Montpellier, France (Referee)* *Dr. F. Rigal, Université de Pau et des Pays de l'Adour, IPREM – UMR 5254, Pau, France (Examiner)* *Pr. D. Schmeller, Université Toulouse III – Paul Sabatier, ECOLAB – UMR 5245, Toulouse, France (Examiner)* *Dr. C. Bellard, CNRS, ESE – UMR 8079, Orsay, France (Advisor)* *Dr. F. Courchamp, CNRS, ESE – UMR 8079, Orsay, France (Co-advisor)*
Oct. 2016 – Dec. 2016 Apr. 2016 – Jul. 2016 (7 months)	***Research assistant*** at the Ecology, Systematic, Evolution unit (UMR 8079), Orsay. Supervised by Céline Bellard and Franck Courchamp. *Understanding island diversity in the face of global change (setting up of the thesis research topic).*
Oct. 2014 – Mar. 2016 (18 months)	***Civic service*** for SUBANTECO scientific program at Kerguelen archipelago (French Southern Territory). Supervised by David Renault.
Sept. – Sept. 2014 (13 months)	***Research assistant*** at the Ecology, Systematic, Evolution unit (UMR 8079), Orsay. Supervised by Céline Bellard and Franck Courchamp. *Combined impacts of global changes on biodiversity across the United States.*
Oct. 2012 – Jun. 2013 (9 months)	***Intership*** at the Ecology, Systematic, Evolution unit (UMR 8079), Orsay. Supervised by Céline Bellard and Franck Courchamp. *Population dynamics and conservation of the Tibetan antelope (Pantholops hodgsonii).*
Feb. 2012 – Jul. 2012 (6 months)	***Intership*** at the Ecology, Systematic, Evolution unit (UMR 8079), Orsay. Supervised by Céline Bellard and Franck Courchamp. *Climate change on global biodiversity hotspots.*
Apr. 2011 – Jun. 2011 (3 months)	***Intership*** at the Station for Theorical and Experimental Ecology (UMR 5321), Moulis. Supervised by Dirk Schmeller. *Effects of aquatic environment and vegetation on the survival of zoospores of the chytrid fungus (Batrachochytrium dendrobatidis).*
Jul. 2010 – Aug. 2010 (2 months)	***Intership*** at the Centre of Biological Studies Chizé (UMR 7372), Chizé. Supervised by Olivier Lourdais

PUBLICATIONS

Submitted manuscripts or in preparation

Bellard, C., Bernery, C. & **Leclerc, C.** (accept with minor revision), Looming extinctions due to invasive species: Irreversible loss of ecological strategy and evolutionary history*. Global Change Biology.*

Leclerc, C., Magneville, C. & Bellard, C. (under review), Conservation hotspots of insular endemic mammalian diversity across a multidimensional approach. *Diversity and Distributions.*

Marino, C., **Leclerc, C.** & Bellard, C. (under review), Profiling insular vertebrates prone to biological invasions: what make them vulnerable?. *Global Change Biology.*

Leclerc, C., Danis, P.-A., Reynaud, N., Frossard, V. & Sentis A. (in prep.), How spatial patterns in lake food-web structure are associated with environmental variables?

Leclerc, C., Courchamp, F. & Bellard, C. (in prep.), Vulnérabilité des milieux insulaires aux changements globaux. In A. Pomade *et al.* (Eds.), Vulnérabilités environnementales : perspectives pluridisciplinaires, *L'Harmattan*.

Peer-reviewed publications

Leclerc, C., Courchamp, F. & Bellard, C. (2020), Future climate change vulnerability of endemic island mammals. *Nature Communications*, 11: 4943.

Leclerc, C., Villéger, S., Marino, C. & Bellard, C. (2020), Global changes threaten functional and taxonomic diversity of insular species worldwide. *Diversity and Distribution*, 26 (4): 402-414.

Leclerc, C., Courchamp, F. & Bellard, C. (2018), Insular threat associations within taxa worldwide. *Scientific Reports*, 8: 6393.

Bellard, C., **Leclerc, C.**, Hoffmann, B.D. & Courchamp, F. (2016), Vulnerability to climate change and sea-level rise of the 35th biodiversity hotspot, the Forests of East Australia. *Environmental Conservation*, 43 (1): 79-89.

Bellard, C., **Leclerc, C.**, & Courchamp, F. (2015), Combined impacts of global changes on biodiversity across the USA. *Scientific Reports*, 5: 11828.

Bellard, C., Russell, J., Hoffmann, B.D., **Leclerc, C.** & Courchamp, F. (2015), Adapting island conservation to climate change – Response to Andréfouët et al. *Trends in Ecology & Evolution*, 30 (1): 2-3.

González-Muñoz, N., Bellard, C., **Leclerc, C.**, Meyer, J-Y. & Courchamp, F. (2015), Assessing current and future risks of invasion by the "green cancer" Miconia calvescens. *Biological Invasions*, 17 (11): 3337-3350.

Leclerc, C.*, Bellard, C.*, Luque, G.M. & Courchamp, F. (2015), Overcoming extinction: understanding processes of recovery of the Tibetan antelope. *Ecosphere*, 6 (9): 1-14. (*equal contribution)

Bellard, C., **Leclerc, C.** & Courchamp, F. (2014), Impact of sea level rise on the ten insular biodiversity hotspots. *Global Ecology & Biogeography*, 23 (2): 203-212.

Bellard, C., **Leclerc, C.**, Leroy, B., Bakkeness, M., Veloz, S., Thuiller, W. & Courchamp, F. (2014), Vulnerability of Biodiversity hotspots to global change. *Global Ecology & Biogeography*, 23 (12): 1376-1386.

Courchamp, F., Hoffmann, B.D., Russell, J., **Leclerc, C.** & Bellard, C. (2014), Climate change, sea-level rise, and conservation: keeping island biodiversity afloat*. Trends in Ecology & Evolution*, 29 (3): 127-130.

Schmeller, D.S., Blooi, M., Martel, A., Garner, T.W.J., Fisher, M.C., Azemar, F., Clare, F.C., **Leclerc, C.**, Jäger, L., Guevara-Nieto, M., Loyau, A., & Pasmans, F. (2014), Microscopic aquatic predators strongly affect infection dynamics of a globally emerged pathogen. *Current Biology*, 24 (2): 176-180.

Bellard, C., **Leclerc, C.** & Courchamp, F. (2013), Potential impact of sea level rise on French islands worldwide. *Nature Conservation*, 5: 75-86.

Technical reports

Leclerc, C., Danis, P.-A., Reynaud, N., Frossard, V. & Sentis A. (2020). Réseaux trophiques des plans d'eau métropolitains : Reconstruction de la structure des réseaux trophiques à partir des données de suivi obtenues dans le cadre de la mise en application de la Directive Cadre sur l'Eau. *OFB/INRAE/USMB/Pôle ECLA*, 35 pages.

Book chapters

Bellard, C., **Leclerc, C.** & Courchamp, F. (2019), Case study 4: The effects of sea-level rise on habitats and species. In T.E. Lovejoy and L. Hannah (Eds.), Biodiversity and Climate Change, *Yale University Press*, pp. 125-127.

Thesis

Leclerc, C. (2019). Biodiversité endémique insulaire face aux changements globaux : états des lieux dans un contexte de conservation. *Université Paris-Saclay*, 185 pages.

Outreach publications

Leclerc, C. (2018), Les principales conséquences du réchauffement climatique sur la biodiversité. *Cahiers de l'Atelier*, 558: 37-42.

SCIENTIFIC PRESENTATIONS

International conferences:

Jan. 2019 (oral presentation)	*9th Biennal Conference International Biogeography*, Málaga, Spain. **Leclerc, C.**, S. Villéger, Courchamp, F. & Bellard, C. "Global changes threaten functional and taxonomic diversity of insular species worldwide".
Oct. 2018 (oral presentation)	*SFEcologie – International Conference on Ecological Sciences*, Rennes, France. **Leclerc, C.**, Courchamp, F. & Bellard, C. "Insular threat associations within taxa worldwide".
Feb. 2017 (poster)	*4th Young Natural History scientists' Meeting*, Paris, France. **Leclerc, C.**, Courchamp, F. & Bellard, C. "Major threats that imperil insular ecosystems".
Jul. 2014 (oral presentation)	*Island Biology*, Honolulu, Hawaii. **Leclerc, C.**, Bellard, C. & Courchamp, F. "Impact of sea-level rise on insular ecosystems".
Feb. 2014 (poster)	*1st Young Natural History scientists' Meeting*, Paris, France. **Leclerc, C.**, Bellard, C., Hoffmann, B.D. & Courchamp, F. "Climate change, sea-level rise, and conservation priorities: The case of the 35th biodiversity hotspot".

National conferences:

Nov. 2020 (oral presentation)	*Day of the Pole Research & Development on Lacustrine Ecosystems (ECLA) – OFB/INRAE/USMB*, virtual event. **Leclerc, C.**, Danis, P.-A., Reynaud, N., Frossard, V. & Sentis A. "Reconstituer la structure des réseaux trophiques grâce aux données collectées dans le cadre de la Directive Cadre sur l'Eau".

FURTHER QUALIFICATIONS

Languages:
French (mother tongue), English (common and scientific)

Computational skills:
R (confirmed), QGIS (intermediate), Gephi (intermediate), Inkscape (intermediate), PostgreSQL (initiate)

Experimental and fieldwork skills:
- Capture-mark-recapture for amphibians
- Points transect method
- Field experiences in mountain area (French Pyrenees) and subantarctic area (Kerguelen archipelagos)

TEACHING AND RESEARCH TRAINING

Supervising:

2019 (6 months)	Camille Magneville (Master student 2nd year – Université de Rennes 1 / Agrocampus Ouest) – Assessment of multiple dimensions of insular biodiversity in order to establish conservation priorities. Co-supervision with Céline Bellard.

RESPONSABILITIES

Administrative and associative responsibilities:

Mar. 2018 – Mar. 2019 (12 months)	Representative of non-permanents (PhD student, Post-doc, contract worker) at the Unit Council of the Ecology, Systematic, Evolution unit (Orsay, France).

Scientific reviewer for:
Biodiversity and Conservation, *Climatic Change*, *Conservation Biology*, *Diversity and Distributions*, *Forests*, *GeoResJ*, *Global Change Biology*, *Journal of Applied Ecology*, *Mammalian Biology*, *Perspectives in Ecology and Conservation*, *PLoS ONE*, *Royal Society Open Science*, *Scientific Reports*

Membership in scientific societies:

2017 – present	French Society of Ecology and Evolution (SFE²)
2019 – present	International Biogeography Society (IBS)

GRANTS & AWARDS

2019	Student Travel Grant (190€) – *9th Biennal Conference International Biogeography*, Málaga, Spain.
2017	Best Poster Presentation (200€) – *4th Young Natural History scientists' Meeting*, Paris, France. (https://www.sfecologie.org/2017/03/11/laureats-sfe-jeunes-chercheurs-sciences-naturelles/)

REFERENCES

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