Valentin **Lucet**

ECOLOGIST · RESEARCH SOFTWARE ENGINEER

(+1) 438-832-5167 | ✉ Valentin.lucet@gmail.com | ⌂ vlucet.github.io
vlucet | valentin-lucet | VLucet | V. Lucet

As an ecologist, I am interested in complex working landscapes, social ecological systems, and interdisciplinary approaches.
Passionate about open and reproducible science, I develop tools for researchers and managers, and teach computational methods.

Education

M.Sc. in Landscape Ecology
Montreal, QC
GONZALEZ LAB, MCGILL UNIVERSITY — *2018 - 2020*

- **Thesis**: Integrating land use and land cover change simulations, stakeholder understanding of the landscape, and connectivity modelling: a case study in the Montérégie region in southern Québec
- *Connectivity and landscape change modelling & Stakeholder workshop*

B.Sc. (Hons) in Biology (Maj.), Anthropology (Min.)
Montreal, QC & Barbados
GUICHARD LAB, MCGILL UNIVERSITY — *2014 - 2018*

- **Thesis**: Grazing preferences of coral reefs fishes | *Fieldwork with the University of the West Indies*

French Baccalaureate Diploma
France
GRADE: 17.5/20 - MENTION TRÈS BIEN / BAC S (SPÉ BIO) — *2011 - 2014*

Skills

Programming	R (advanced) / Python - Julia - Bash - SQL - Matlab (familiar)
GIS tools	GDAL - GRASS - QGIS - ArcGIS - PostGIS
Other	Git - Markdown - LaTex - Hugo
Languages	French (native) - English (fluent) - Spanish (basics)

Experience

Research Software Developer
Montreal, QC
CONCORDIA UNIVERSITY - PEDERSEN QUANTITATIVE FISHERIES ECOLOGY LAB — *2021 - Present*

- Development of the **sspm** and **csdm** R packages, workshop development and delivery with DFO
- Grad student mentoring: teaching of skills for open and reproducible science

Data Scientist
QC
ENVIRONMENT AND CLIMATE CHANGE CANADA · LANDSCAPE SCIENCE UNIT — *2021 - 2021*

- Contributions to R packages **pfocal** and **LSTDConnect** (currently private)
- Contributions to a Canada-wide connectivity analysis (in prep)

Landscape ecologist
QC
APEX RESOURCES MANAGEMENT SOLUTIONS — *2020 - 2021*

- Projects: carbon cycle models, epidemiological models, **STSIM** development and maintenance

CONTRACTS & CONSULTING

APEX Resources Management Solutions
QC
R DEVELOPPER — *2019 - 2020*

- Improvement and CRAN submission for the R package **Rsyncrosim**

MELCC – Ministère de l'Environnement   *QC*
REPORTER   *2019*
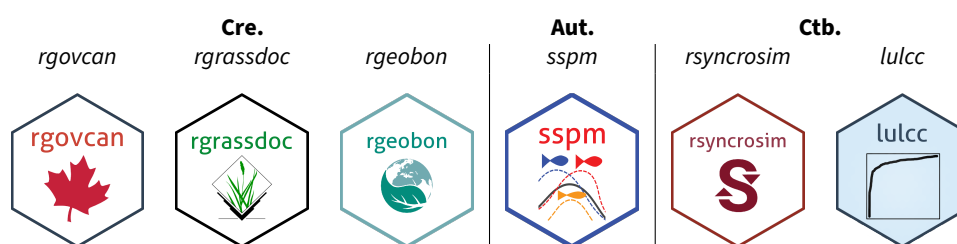- Contributions to an analysis of ecological connectivity for the Saint Lawrence Lowlands and translation to French

MFFP – Ministère des Forêts, de la Faune et des Parcs   *QC*
REPORTER   *2019*
- Contributions to a report on ecological connectivity in the northwest America as part of the working group related to the 40-3 resolution

Software

	Cre.		**Aut.**	**Ctb.**	
rgovcan	*rgrassdoc*	*rgeobon*	*sspm*	*rsyncrosim*	*lulcc*

Teaching

WORKSHOPS

R Package Development for Research: an Introduction   *Online*
OFFERED AT THE CSEE 2021 MEETING   *2020*

Version Control with RStudio and the Command Line   *Online, In person*
OFFERED AT MCGILL AND CONCORDIA UNIVERSITY   *2019, 2020*

A Very Short Introduction to Compute Canada Resources   *Online*
OFFERED AT CONCORDIA UNIVERSITY   *2021*

SQL for Ecologists with R and Tidyverse Equivalent   *Online*
OFFERED AT CONCORDIA UNIVERSITY   *2021*

ASSISTANTSHIPS

2019	**Conservation Biology**, Tutorials, lectures and grading	*McGill University*
2018-19	**Animal Diversity**, Labs and grading	*McGill University*
2017-20	**Biometry**, Tutoring	*McGill University*

Honors & Awards

2021	**QCBS Learning and Development Award**,	*$150*
2020	**QCBS Excellence Travel Award**,	*Waived (COVID-19)*
2019	**FRQNT (Fonds de Recherche du Québec - Nature et Technologie) M.Sc. Bursary**,	*$17,5k*
2018	**Frank Rigler Prize in Ecology**,	*$785*
2017	**SURA (Student Undergraduate Research Award)**,	*$6,725*

Publications

Thesis

Valentin Lucet. "Integrating land use and land cover change simulations, stakeholder understanding of the landscape, and connectivity modelling: a case study in the Montérégie region in southern Québec". MA thesis. McGill University, 2021.

Presentations

The sspm R package: spatial surplus production models for the management of northern shrimp fisheries. Annual Meeting of the Quebec Center for Biodiversity Science. 2021.

Integrating land use and land cover change simulations and connectivity modeling: a case study in the Monteregie region in southern Quebec. Annual Meeting of the International Association for Landscape Ecology - North America chapter (IALE-NA). 2020.

Intégrer des simulations de changements d'utilisation des sols et des modèles de connectivité: un exemple en Montérégie dans le sud du Québec. Annual Meeting of the Quebec Center for Biodiversity Science. 2019.

Differences in habitat use between two parrotfish grazers modulates the resilience of Caribbean coral reefs. Annual Meeting of the Quebec Center for Biodiversity Science. 2018.

Reports

Annexe–Modélisation de la connectivité de l'habitat terrestre dans les Basses-Terres du Saint-Laurent selon différents scénarios de changements climatiques et d'occupation des sols
Bronwyn Rayfield, Guillaume Larocque, Kyle T Martins, Valentin Lucet, Colin Daniel, Andrew Gonzalez
Tech. rep., 2021

Changing terrestrial habitat connectivity within the St. Lawrence Lowlands under scenarios of climate and landcover change
Bronwyn Rayfield, Guillaume Larocque, Kyle T. Martins, Valentin Lucet Lucet, Colin Daniel, Andrew Gonzalez
Tech. rep., 2021

A review of ecological connectivity analysis in the Region of Resolution 40-3
Alex Arkilanian, Guillaume Larocque, Valentin Lucet, Deanna Schrock, Célia Denépoux, Andrew Gonzalez
Tech. rep., 2020