



# Valentin Lucet

ECOLOGIST · RESEARCH SOFTWARE ENGINEER

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■ 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

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### M.Sc. in Landscape Ecology

GONZALEZ LAB, MCGILL UNIVERSITY

Montreal, QC

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

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**Programming** R (advanced) / Python, Julia, Bash, SQL, Matlab (familiar)

**GIS tools** GDAL, GRASS, QGIS, ArcGIS (proficient) - PostGIS (familiar)

**Other** Git & GitHub (incl. pages), Docker, Markdown, LaTex, Hugo

**Languages** French (native) - English (fluent) - Spanish (basics)

## Experience

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### 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

REPORTER

- Contributions to an analysis of ecological connectivity for the Saint Lawrence Lowlands and translation to French

QC

2019

## MFFP – Ministère des Forêts, de la Faune et des Parcs

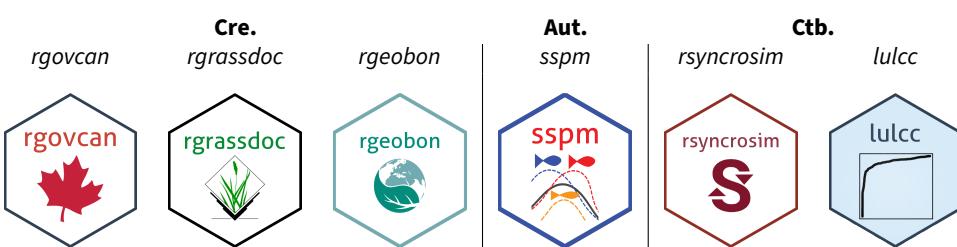
REPORTER

- Contributions to a report on ecological connectivity in the northwest America as part of the working group related to the 40-3 resolution

QC

2019

## Software



## 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

2019-20

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

## Volunteering

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### Redpath Museum

#### FUNDRAISING AMBASSADOR

- Seeds of Change Plesiosaur project - \$13,000 raised
- Cutting Edge Lectures project - \$2,850 raised

McGill University

2015 - 2017

### Redpath Museum Student Society

#### VP COMMUNICATIONS, VP EVENTS, VP

McGill University

2015-2018

### ARCHELON (Sea Turtle Protection Society of Greece)

#### MORNING SURVEY VOLUNTEER FOR A TOTAL OF 5 MONTHS

Crete

2015, 2016

### Abouheif Lab

#### UNDERGRADUATE VOLUNTEER

McGill University

2015-2016

### WWF Quebec - Project “Ours Polaire sur Glaces Ephémères”

#### PUBLIC AWARENESS VOLUNTEER

Montreal, QC

2015

### McGill bird observatory

#### MORNING SURVEY VOLUNTEER

Montreal, QC

2014

### Editions Hélène D'Ormesson

#### INTERN - MANUSCRIPT PROOF READER

Paris, France

2012

## Publications

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### 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, 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 Montréal region in southern Québec

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  
MELCC, 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, Colin Daniel, Andrew Gonzalez  
MELCC, 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  
MFFP, 2020