# Valentin Lauret









PhD student statistical ecology and social sciences University of Montpellier, CEFE - CNRS lab

### research interests

My research focus on applied biodiversity conservation, with a particular interest in interdisciplinary approaches using statistical ecology and social sciences to work with managers and public policies.

### experience

#### 2018 - 2021 PhD Thesis

with Olivier Gimenez, University of Montpellier, CEFE-CNRS Montpellier, France

#### Linking statistical ecology and social sciences to investigate how to perform efficient bottlenose dolphin monitoring in the french Mediterranean marine protected areas network

- Building statistical tools to integrated data from different monitoring programs about bottlenose dolphins.
- Investigating social dimensions of monitoring in protected areas.
- Joint work with NGOs, managers, and public institutions.

#### 2018 Jan-Jul

with Olivier Gimenez, University of Montpellier, CEFE-CNRS Montpellier, France

#### **Exploring adaptive management for protected areas**

- Building an adaptive monitoring framework aiming at optimizing survey effort across a network of protected areas

#### 2017 Sept-Dec

with Beatriz Arroyo, François Mougeot, and Miguel Delibes-Mateos IREC-CSIC, Ciudad Real, Spain

### Understanding conservation conflicts associated with rodent outbreaks in Spain

 Leading Q-methodology interviews to identify stakeholders' viewpoints and highlight shared opinions about rodent outbreaks and their management

#### 2017 Jan-Jun MSc Thesis

with Julie Louvrier and Olivier Gimenez University of Montpellier, CEFE-CNRS Montpellier, France

### Using opportunistic and uncertain data to study wolf recolonization in France

 Extending dynamic occupancy models to account for misidentification and include uncertain data about wolf recolonization in France

#### 2016 Feb-Jun

with Samuel A. Cushman and Ho Yi Wan Rocky Mountain Research Station, US Forest Service, Flagstaff, Arizona, USA

### Applying multi-scale habitat suitability models to the Mexican Spotted Owl in Southwestern USA

#### 2015 Jun-Aug

with John Grace Univeriity of Edinburgh, Botanical Society of Scotland, Edinburgh, Scotland

#### Building a citizen science guide of the urban flora of Scotland

 Inventory of urban flora of Edinburgh and constrution of identification key for citizen science

#### 2014 Oct-Apr

with Jean Trap, Eco&Sols, French National Institue for Sustainable Development, Montpellier, France

### Optimizing phosphorus transfer from the soil to the plant exploring agro-ecological strategies

### education

<b>2016-2017</b> Lyon, France	Master degree in Biological sciences Ecole Normale Supérieure de Lyon, University of Lyon
<b>2015</b> Lyon, France	Bachelor in Geosciences, Paleontology, Evolution Ecole Normale Supérieure de Lyon, University of Lyon
<b>2012-2014</b> Montpellier, France	Preparatory classes for engineering schools Lycée Joffre,
2012 Valence, France	French high school diploma

### additional skills

## ecological modelling and statistics

Experience with occupancy models, spatial catpure, recapture, distance sampling, adaptive management, and structured decision making Bayesian statistics

## scientific field work experience

2019-2020, French Mediterranean Sea Bottlenose dolphins photo-identification, 3 weeks at-sea monitoring expedition including teaching to marine protected areas managers.

2018, Castilla y Léon, Spain Leading social interviews (in Spanish) with farmers, hunters, conservationists, and members of local government

2017, Arizona, USA Monitoring spotted owl nesting sites in Grand Canyon National Park

### computer and code

Advanced R programming spatial ecology and GIS with R Basics of Python, Matlab Reproductible science and code with Markdown and Git MCMC with JAGS and NIMBLE

### languages

French, English, Spanish

### volunteering

Since 2018

Opti-Pousse Haie, working with local communities to enhance ecological and agricultural sustainability in NW Madagascar, 2 months mission in 2018 Analalava, Région Sofia, Madagascar

Since 2019

Member of the Human Rights League Montpellier, France

### teaching experience

2019 INTERACT project, MIRACETI NGO Nice, France	Organizing inter-professionnal working groups to identify bottlenose dolphin prorities in the French Mediterranean Sea
2018-2019 University of Montpellier	Ecology, concepts and methods 40h/y for 2nd year Bsc students in Population biology Conducting experimental ecology projects, discovering concepts of ecology, population biology, evolution
2018-2019 University of Montpellier	Basics in data processing and biostatistics for biologists, 32h/y for 1st year Msc students in Ecology and Evolution Initiation to statistics, R programming, linear models

### publications



Valentin Lauret, Hélène Labach, Matthieu Authier, Olivier Gimenez, (in revision), Using single visits for integrated occupancy models to make the most of existing monitoring programs, in review, https://doi.org/10.1101/848663

- Valentin Lauret, Miguel Delibes-Mateos, François Mougeot, Beatriz Arroyo (2019), Understanding conservation conflicts associated with rodentoutbreaks in farmland areas. Ambio, https://doi.org/10.1007/s13280-019-01256-0
- Julie Louvrier, Christophe Duchamp, Valentin Lauret, Eric Marboutin, Sarah Cubaynes, Rémi Choquet, Christian Miquel, Olivier Gimenez (2018), Mapping and explaining wolf recolonization in France using dynamic occupancy models and opportunistic data. Ecography, 41: 647-660. https://doi.org/10.1111/ecog.02874
- Ho Yi Wan, Kevin McGarigal, Joseph L. Ganey, Valentin Lauret, Brad C. Timm, Samuel A. Cushman (2017), Meta-replication reveals nonstationarity in multi-scale habitat selection of Mexican Spotted Owl, The Condor, Volume 119, Issue 4, 1 November 2017, Pages 641–658, https://doi.org/10.1650/CONDOR-17-32.1

### talks

4	2019
1	<b>World Marine Mammals Conference</b>
E	Barcelona, Spain

Combining multiple surveys increases precision and provide more reliable mapping of marine mammls distribution

2018

Pathways: Human Dimensions of Wildlife Conference

Goslar, Germany

Using Q-methodology for understanding conservation conflicts: common voles in Spanish farmlands

Oral presenation performed by Beatriz Arroyo on my behalf at https://digital.csic.es/handle/10261/175502