

FINAL RESUME ON THE RESEARCH UNIT:
Theoretical and Experimental Ecology station
(SETE)

**UNDER THE SUPERVISION OF THE
FOLLOWING INSTITUTIONS AND
RESEARCH BODIES:**

Université Toulouse 3 - Paul Sabatier - UPS
Centre National de la Recherche Scientifique -
CNRS

EVALUATION CAMPAIGN 2019-2020
GROUP A



In the name of Hcéres¹:

Nelly Dupin, Acting
President

In the name of the experts committee²:

Patrick Kestemont, Chairman of the
committee

Under the decree No.2014-1365 dated 14 November 2014,

¹ The president of Hcéres "countersigns the evaluation reports set up by the experts committees and signed by their chairman." (Article 8, paragraph 5);

² The evaluation reports "are signed by the chairman of the experts committee". (Article 11, paragraph 2).

Tables in this document were filled with data submitted by the supervising body on behalf the unit.

UNIT PRESENTATION

Unit name:	Theoretical and Experimental Ecology station
Unit acronym:	SETE
Current label and N°:	UMR 5321
ID RNSR:	201119468T
Application type:	Restructuration
Head of the unit (2019-2020):	Mr Michel LOREAU
Project leader (2021-2025):	Mr Michel LOREAU
Number of teams and/or themes:	2

EXPERTS COMMITTEE MEMBERS

Chair:	Mr Patrick KESTEMONT, University of Namur, Belgium
Experts:	Mr Loïc BOLLACHE, Université Bourgogne Franche-Comté (representative of CNU) Mr Christophe BONENFANT, Université de Lyon Ms Nathalie NIQUIL-ZELLER, CNRS-UNICAEN (representative of CoNRS) Mr Joan PINO, CREA-F-Autonomous University of Barcelona, Spain Mr Benjamin REY, Université de Lyon (supporting personnel)

HCÉRES REPRESENTATIVE

Ms Catherine MOUNEYRAC

REPRESENTATIVES OF SUPERVISING INSTITUTIONS AND BODIES

Mr. Matthieu ARLAT, Université Paul Sabatier

Ms Dominique JOLY, CNRS

INTRODUCTION

HISTORY AND GEOGRAPHICAL LOCATION OF THE UNIT

The Theoretical and Experimental Ecology Station (Station d'Ecologie Théorique et Expérimentale, SETE) is a joint research unit (UMR 5321) of the National Centre for Scientific Research (CNRS) and Paul Sabatier University (Toulouse 3). It is located in Moulis, Ariège, in the foothills of the central Pyrenees, about 100 km south of Toulouse. The laboratory was first founded in 1948 to study physical and biological aspects of underground cave systems. In 2007, it was turned into an experimental ecology station, and in 2016, it became the current Theoretical and Experimental Ecology Station.

Although SETE is rather geographically isolated, it appears that the unit is well connected with the scientific community, both nationally and internationally. During the last five years, SETE has been and is currently involved in several large-scale national and international scientific projects, networks, and organisations, with, as a corollary, an increasing visibility and thus attractiveness for many visitors, from France and from abroad. SETE is part of the CNRS National Network of Experimental Ecology Stations (Réseau National des Stations d'Ecologie Expérimentale, ReNSEE), and has played a key role in the creation, leadership and management of the AnaEE France (Analysis and Experimentation on Ecosystems) national infrastructure project. The unit has been actively involved in the creation of a Laboratory of Excellence: Towards a Unified theory of biotic Interactions: the role of environmental Perturbations (TULIP), which brings together a few key ecology and biology research units from Toulouse, Moulis and Perpignan.

MANAGEMENT TEAM

From January 2018, SETE is headed by Michel LOREAU. The deputy director is Olivier GUILLAUME.

HCÉRES NOMENCLATURE

SVE1_2 Évolution, écologie, biologie des populations

THEMATICS

SETE focuses its research on new developments in theoretical and experimental ecology, in particular on the interactions between human societies, biodiversity and ecosystems with a view to contributing to their long-term sustainability. The general objective of SETE is the development of quantitative approaches that are experimentally testable. One specificity of the approaches developed by SETE is the explicit recognition and integration of four essential characteristics of ecological processes: (1) variations in the environment in space and time inevitably generates heterogeneity in ecological systems; (2) spatial dynamics are of the utmost importance across all biological levels of organization, from gene flow to ecosystem connectivity; (3) evolutionary dynamics gives the capacity of living organisms and systems to adapt; and (4) the resulting diversity and complexity of ecological systems affects their functioning.

UNIT WORKFORCE

SETE		
Active staff	Number 06/30/2019	Number 01/01/2021
Full professors and similar positions	1	1
Assistant professors and similar positions	1	1
Full time research directors (Directeurs de recherche) and similar positions	5	4
Full time research associates (Chargés de recherche) and similar positions	9	8
Other scientists ("Conservateurs, cadres scientifiques des EPIC, fondations, industries, etc.")	0	0
High school teachers	0	0
Supporting personnel (ITAs, BIATSSs and others, notably of EPICs)	10	9
Permanent staff	26	23
Non-permanent professors and associate professors, including emeritus	0	
Non-permanent full time scientists, including emeritus, post-docs (except PhD students)	19	
PhD Students	10	
Non-permanent supporting personnel	16	
Non-permanent staff	45	
Total	71	23

GLOBAL ASSESSMENT OF THE UNIT

As a whole, the unit has had, during the last evaluation period, an outstanding level of scientific activities and outputs, outstanding by the number of publications with very high impact as well as by the number of research projects. SETE published, in the best generalist journals, and major reference journals in biological sciences and ecology. SETE researchers are international leaders in theoretical and experimental ecology, as well as in dispersal and biodiversity dynamics. This makes the unit highly attractive for the best researchers of their disciplines. SETE has been highly successful in the application of external funding, by obtaining European ERC, national grants as coordinator, and numerous other grants as partner. Considering the size of the unit and the outstanding quality of its research, one could expect a stronger interaction of the unit with the non-academic world. Although the average duration of PhD thesis is slightly longer than usual, SETE involvement in training throughout research is excellent, the numerous PhD students benefitting of supervision by high-level scientists. The project strategy has proposed a reorganization of the unit, with the realignment of the former 3 teams into 2, the creation of a set of transversal axes and experimental platforms of services. The internal communication, the absence of a clear strategy for optimizing the use of experimental platforms and the lack of technical support still remain as issues. The orientation of the new research teams LINKING and CHANGE is highly relevant for understanding the links between biodiversity changes, ecosystem functioning and interactions with humans (LINKING), and the eco-evolutionary processes underlying responses to environmental variability.

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Evaluation of clusters of higher education and research institutions

Evaluation of higher education and research institutions

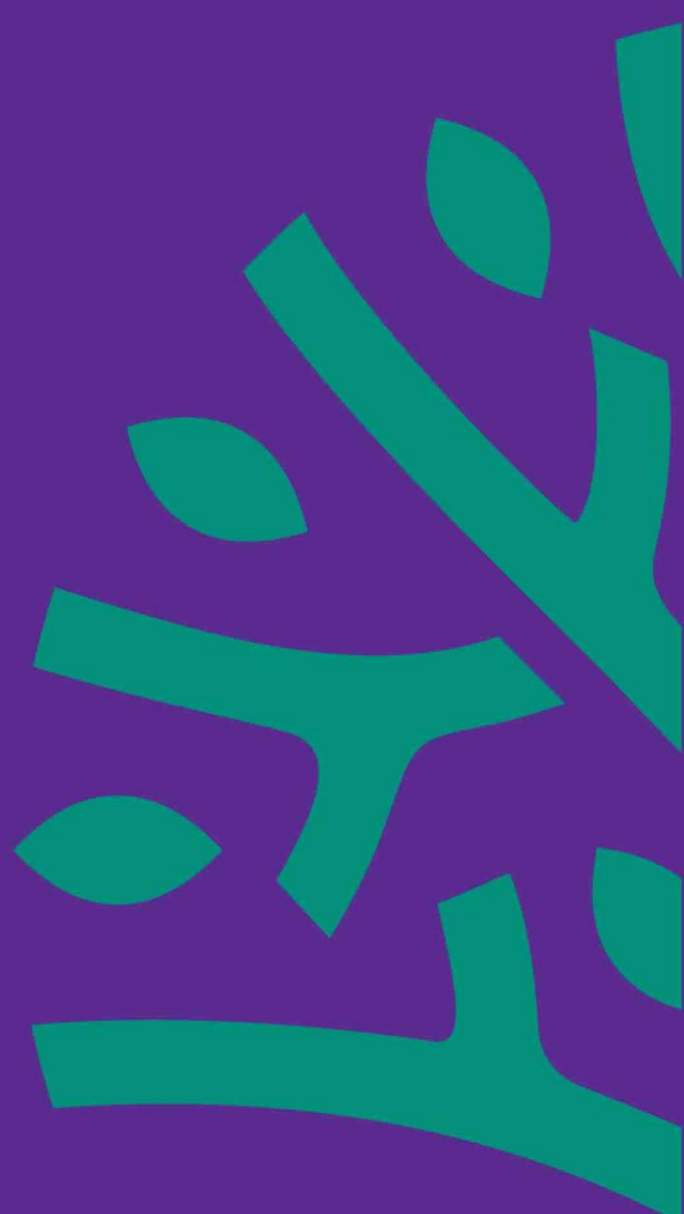
Evaluation of research

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