



Dr. Nathalie Pettoirelli

Institute Research Fellow

Curriculum Vitae



Current positions

- › Committee on Earth Observation Systems (CEOS) [Biodiversity](#) Steering Committee Member
- › IUCN [Mangrove](#) Specialist Group Member
- › [GEO BON](#) Member
- › Member of the Board of Governors, Society for Conservation Biology
- › British Ecological Society's Public and Policy Committee member
- › British Ecological Society's [Conservation Specialist Interest Group](#) Secretary
- › Invited lecturer at the [Global Change Ecology Master Programme](#), Bayreuth, Germany
- › Honorary Lecturer position, University College London (UCL)
- › [CEE](#) Steering Committee member
- › ZSL climate change coordinator & Conservation Committee member
- › [Animove](#) organizer and lecturer

Previous positions

- › June 2010: L'Oréal UK and Ireland Fellowship for Women in Science
- › August 2009 - November 2009: Secondment at the World Conservation Monitoring Centre (UNEP-WCMC), Cambridge, to work on REDD issues.
- › April 2006 - March 2009: Postdoctoral Research Assistant at the Institute of Zoology
- › September 2005 - March 2006: Postdoctoral position at the University Laval, Québec, under the supervision of Steeve Côté and Jean Huot (Chaire CRSNG – Produits forestiers Anticosti).
- › December 2003 - August 2005: European Fellowship (Marie Curie) for a two-year proposal entitled “Coupling vegetation dynamics and deer performance in Norway and France” at the University of Oslo, with Atle Myrsetrud and Nils Chr. Stenseth.
- › December 2002 - November 2003: Lavoisier Fellowship (Ministry of Foreign Affairs, France) for a one-year proposal entitled “Coupling phenology and red deer body mass in the West Coast of Norway” at the University of Oslo, with Atle Myrsetrud and Nils Chr. Stenseth.
- › 1999 - 2002: Ph.D. Thesis “Individual variability and population dynamics: the importance of space”, with J.M. Gaillard (UMR CNRS 5558, University of Lyon).

Research Interests

I head the Environmental Monitoring and Conservation Modelling (EMCM) team, which is interested in developing tools and methodologies supporting the sustainable management of natural resources. My own research is about assessing and predicting the impacts of global environmental change on biodiversity and ecosystem services, with a particular focus on climate change; the aim is to conduct high quality, innovative and internationally recognized research through a multi-disciplinary approach involving statistics, remote sensing and programming.

Extensive experience with remote sensing data and its usefulness in ecology and conservation drives my interest in promoting a better integration of satellite-based data in global monitoring programs.

Funding

- 2015: BEAMS Impact scheme (£33,000) - PhD studentship on roe deer population dynamics
- 2014: GEO-BON grant (Co-PI) to organise two workshops on RS-EBVs (€12,000)
- 2014: STFC grant (Co-PI) to support Soapbox Science (£90,000)
- 2014: ZSL mission Fund grant (PI) to support work in desert ecosystems (£65,500)
- 2011- 2014: For Women In Science (FWIS) grants to fund Soapbox Science (>£40,000)
- 2013: BEAMS Impact scheme (£33,000) for Clare Duncan
- 2013: Conservation Programmes, ZSL (£14,000)
- 2012: Conservation Programmes, ZSL (£10,000)
- 2011: Full 4 years UCL/EngD PhD studentship for Gianfranco Gliozzo (with Dr Muki Haklay)
- 2010: L'Oréal UK and Ireland Fellowship for Women in Science (£15,000)
- 2010: Full NERC PhD studentship for Tammy Davies (with Dr Fazey)
- 2010: Full ESRC/NERC PhD studentship for Claudia Amphlett (with Prof. Homewood & Dr Durant)
- 2009: UNEP-WCMC (£15,984)
- 2009: Full NERC PhD studentship for Caitlin Douglas (with Dr Mulligan & Dr Cowlshaw)
- 2009: AXA PhD studentship for Alienor Chauvenet (£105,000)
- 2003: European Marie Curie Fellowship (~£125,000)
- 2002: Lavoisier Fellowship from the French Ministry of Foreign Affairs (~£15,000)
- Minor grants secured from NERC, the Sahara Conservation Fund, the Royal Society, WCS, Vodafone, and Planet Action (all <£5,000)

Science Communication

I am the co-founder of [Soapbox Science](#) , an initiative which organizes public science communication events that brings cutting-edge science to the public, in an accessible, fun, free and un-intimidating way.

Editorial Board

- [Remote sensing in Ecology and Conservation](#) (Editor in Chief)
- [Journal of Applied Ecology](#) (Senior Editor)
- [Animal Conservation](#) (Senior Editor)

Meet the team

I have supervised, and currently supervise, several BSc, MSc, PhD and post-doc students , who are carrying research all over the world. [Meet the team here.](#)

News

- My first book "en solo", entitled "The Normalised Difference Vegetation Index: principles & ecological applications" is [out](#) !

- The "[Satellite remote sensing for biodiversity research and conservation applications](#)" theme issue of Philosophical Transactions B is out. This issue is guest edited by me, Kamran Safi, Woody Turner and Stefan Dech
- Our work was recently featured in [Current Biology](#)
- Animove was featured in a recent [IUCN blog](#), described as a "a ground-breaking capacity-building contribution"
- Our recent contribution in Ecology Letters on fences was featured in [Nature](#)
- Our article on mangrove degradation was covered by the [Guardian](#)
- Our edited [book](#) is also out!

Recent Publications

[More details of publications from Dr Nathalie Pettorelli are available here](#)

Durant, Becker, Creel, Bashir, Dickman, Beudels-Jamar, Lichtenfeld, Hilborn, Wall, Wittemyer, Badamjav, Blake, Boitani, Breitenmoser, Broekhuis, Christianson, Cozzi, Davenport, Deutsch, Devillers, Dollar, Dolrenry, Douglas-Hamilton, Droge, Fitzherbert, Foley, Hazzah, Hopcraft, Ikanda, Jacobson, Joubert, Kelly, Milanzi, Mitchell, M'Soka, Msuha, Mweetwa, Nyahongo, Rosenblatt, Schuette, Sillero-Zubiri, Sinclair, Stanly-Price, Zimmermann & Pettorelli (2015) Developing fencing policies for dryland ecosystems. *Journal of Applied Ecology*, *in press*

Belbachir, Pettorelli, Wachter, Belbachir-Bazi, Durant (2015) Monitoring rarity: the critically endangered saharan cheetah as a flagship species for a threatened ecosystem. *PLoS One* [10](#)

Stephens, Pettorelli, Barlow, Whittingham & Cadotte (2015) Management by proxy? The use of indices in applied ecology. *Journal of Applied Ecology* **52**: 1-6

Turner, Rondinini, Pettorelli, Mora, Leidner, Szantoi, Buchanan, Dech, Dwyer, Herold, Koh, Leimgruber, Taubenboeck, Wegmann, Wikelski & Woodcock (2015) Free and open-access satellite data are key to biodiversity conservation. *Biological Conservation* **182**: 173-176.

Duncan, Chauvenet, Brown & Pettorelli (2015) Energy availability, spatiotemporal variability, and implications for animal ecology. *Diversity & Distribution* **21**: 290-301

Pettorelli, Nagendra, Williams, Rocchini & Fleishman (2014) [A new platform to support research at the interface of remote sensing, ecology and conservation](#). *Remote Sensing in Ecology and Conservation* **1**: 1-3

Turvey & Pettorelli (2014) Spatial congruence in language and species richness but not threat in the world's top linguistic hotspot. *Proceedings of the Royal Society B* **218**: 20141644.

Pettorelli, Laurance, O'Brien, Wegmann, Harini & Turner (2014) Satellite Remote Sensing for Applied Ecologists: Opportunities and Challenges. *Journal of Applied Ecology* **51**: 839-848.

Durant, Pettorelli, Blackburn, Baillie, Boxshall, Brooks, Carbone, Coulson, Crees, Cunningham, Daniels, Deinet, Ewen, Gaston, Gregory, Hayward, MacDonald, Mace, May, Norris, Pimm, Raffaelli, Redpath & Sutherland (2017) UK bill could prompt biodiversity loss. *Nature* **512**: 253.

Contact information

Tel 020 7449 6334



Address

Institute of Zoology
Zoological Society of London
Regent's Park
London
NW1 4RY
United Kingdom

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