

HEDVIG K. NENZÉN

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EDUCATION

PhD in Biology	9/2011 –
Université du Québec à Montréal	Canada
Thesis: Space-time interactions in forest metacommunities	
Advisors: Pedro Peres-Neto and Dominique Gravel	
Master, Ecology and Conservation	8/2008 – 8/2010
Uppsala University	Sweden
Advisor: Miguel B. Araújo	
Bachelor of Arts, Biology, magna cum laude	8/1999 – 5/2003
Whittier College	California, USA

PUBLICATIONS

- Nenzén, HK, S Varela, D Montoya. 2014. The impact of 850,000 years of climate changes on the structure and dynamics of mammal food webs. *PlosOne* 9: e106651
- Nenzén, HK, R Swab, DA Keith, MB Araújo. 2012. demoniche – an R-package for simulating spatially-explicit population dynamics. *Ecography* 35: 577-580. 10.1111/j.1600-0587.2012.07378.x
- Nenzén, HK, MB Araújo. 2011. Choice of threshold alters projections of species range shifts under climate change. *Ecological Modelling* 222: 3346-3354. 10.1016/j.ecolmodel.2011.07.011
- Nenzén, HK, E Filotas, P Peres-Neto, D Gravel. Landscape models reproduce cyclic insect outbreaks. *In review in Oikos*
- Nenzén, HK, Domic, A, Gomez, MI, Naoki, K. Multiple Human Activities (Burning, Logging, and Grazing) Inhibit Regeneration of a Threatened Andean Tree Species (*Polylepis pepeii*, Rosaceae) in Bolivia. *In preparation*

RESEARCH PRESENTATIONS and POSTERS

- More than Moran: dispersal and climate effects on insect outbreaks 2014 (*presentation*)
Nenzén, HK, P Peres-Neto, D Gravel. *Quebec Center for Biodiversity Science Annual Symposium*, Canada
- Epidemiological models reproduce cyclic insect outbreaks 2014 (*presentation*)
Nenzén, HK, E Filotas, P Peres-Neto, D Gravel. *ESA annual conference*, USA
- Why are there large spruce budworm outbreaks? 2014 (*invited presentation*)
Nenzén, HK, *Forest Complexity Modelling Summer School*, Canada
- Complex dynamics of forest insect outbreaks with a simple epidemiological model 2013 (*invited presentation*)
Nenzén, HK, *Forest Complexity Modelling Summer School*, Canada
- Space-time interactions in forest metacommunities 2012 (*presentation*)
Nenzén, HK, *Quebec Center for Biodiversity Science Annual Symposium*, Canada
- Evo-Eco interactions in complex spatial food webs 2012 (*poster*)
Nenzén, HK, P Peres-Neto, D Gravel. *Joint Congress on Evolutionary Biology*, Canada
- Unravelling Pleistocene food webs 2011 (*poster*)
Nenzén, HK and S Varela. *Applications of Network Theory—the Conference*, Sweden

Responses to climate and land-use changes in a coupled demographic and bioclimatic envelope model
 Nenzén, HK, K Naoki, MI Gómez, R Early and MB Araújo. *International Biogeography Society Conference*,
 Greece 2011 (poster)
 Seedling recruitment in the coastal sage scrub -grassland ecotone with respect to native and non-native grasses.
 Nenzén, HK and C Swift. *ESA annual conference*, USA 2003 (poster)

AWARDS and GRANTS

Best presentation, Ta these en 180 secondes, UQAM (\$250)	2015
FQRNT Doctoral Research Fellowship (\$8,000)	2014
Excellence Award for conference, Quebec Center for Biodiversity Science (\$950)	2014
Best popular science presentation, graduate students, UQAR (\$250)	2014
Forest Complexity Modelling program (\$10,000 yearly)	2011-2013
FARE Excellence graduate fund, UQAM (\$6,000 yearly)	2011-2014
Best popular science resume, with coauthors, Popular Science conference, UQAR (\$125)	2013
Excellence Award, Quebec Center for Biodiversity Science (\$1,825)	2012
JAÉ-predoc doctoral program fellowship, Spain (declined)	2011
Travel grant, International Biogeography Society Annual Conference (\$190)	2010
Internship stipend, Smithsonian Environmental Research Center (\$6,000)	2003
Outstanding Biology Student (department honor), Elected to Biological Honors Society	2003
Graduated Magna Cum Laude	2003
Summer research stipend, University of Minnesota (\$3,500)	2002

RESEARCH EXPERIENCE

Researcher	12/2010 – 7/2011
Rui Nabeiro Biodiversity Chair, CIBIO	Évora, Portugal
<ul style="list-style-type: none"> Created R-package with linked demographic and climatic modelling. Hosted and arranged two talks by visiting researchers. 	
Associated researcher	8/2009 – 2/2010
Spatial Analysis Center, University of San Andrés	La Paz, Bolivia
<ul style="list-style-type: none"> Carried out field inventory to investigate structure of threatened tree-line forest. Performed germination experiments at different temperatures to determine effects on reproduction. 	
Conservation Planner	9/2007 – 7/2008
Conservation International	La Paz, Bolivia
<ul style="list-style-type: none"> Created Geodatabase to identify and map ‘Key Biodiversity Areas’ in Bolivia. 	
Field Botanist	7/2004 – 5/2005
Amazon Conservation Association	La Paz, Bolivia
<ul style="list-style-type: none"> Participated in two month-long research excursions to Madidi National Park. Collected and identified plants, collected and analyzed transect data in grassland and forest habitats. 	

TEACHING and MENTORING EXPERIENCE

Co-instructor, R workshops (10h)	2015
Quebec Center for Biodiversity Science, Canada	
Co-instructor, modelling the Spruce Budworm system, workshop with D. Gravel (12h)	2014
Forest Complexity Modelling Summer School, Canada	
Workshop presentation, Using sage for Local Stability Analysis (1h)	2013
‘Modelling Techniques in Ecology Summer School’, Université du Québec à Rimouski, Canada	
Workshop instructor, ‘Introduction à R’ (24h)	2012
Université du Québec à Rimouski, Canada	

Workshop organizer and instructor, 'Introduction to R' (12h) Universidade de Évora, Portugal	2011
Workshop co-instructor, 'Global change and Biodiversity' Msc course (10h) Universidad International Menéndez Pelayo, Spain	2010
Biology Teacher, middle and high school Saint Andrews International School, Bolivia	1 – 12/2006

SCIENCE OUTREACH and SERVICE

'Épidémies de Tordeuse' Ta these en 180 secondes presentation, winner, UQAM	2015
'Women in Science' presentation to laboratory, UQAM	2015
Student representative to Quebec Center for Biodiversity Science	2014 –
Session moderator, Quebec Center for Biodiversity Science Annual Symposium	2012, 2014
'8 Things We Can Do Now to Build a Space Colony This Century', interview, <i>io9.com</i>	2014
'Women in Science' Seminar organiser, Rimouski, Canada	2014
'L'équilibre dans la Nature' presentation, Popular Science conference, Rimouski	2014
'Girls in Science' Workshop, Rimouski, Canada	2014
'Midis numériques', organiser of departmental seminar series, Rimouski, Canada	2013 – 2014
Volunteer, International Biogeography Society conference, Montreal, Canada	2013
'Premier jour après l'extinction de l'humanité sur Terre'. Presentation, Popular Science conference, UQAR	2013
L'écologie théorique: exemple de modélisation d'un écosystème boréal. Stand, Popular Science conference, UQAR	2013, 2014
Judge, Evolution conference student presentation award	2012
'Le Synchronisme dans la Nature'. Presentation, Popular Science conference, UQAR	2012
Volunteer, ESA conferences.	2003, 2012
Communications Intern, Food International Action Network, Sweden	summer 2009
Blog about Bolivian research project 'High Altitude Ecology'	2009 – 2010
Radio interview, entomology project, Swedish radio	2009
Education assistant and guide, Vesty Pakos Zoological Garden, Bolivia	2005
Reviewer: Ecography (3), Journal of Biogeography (3), Ecological Complexity (1), Diversity and Distributions (1), Peerage of Science (4), QCBS research award	

SOFTWARE

demoniche – spatial population dynamics. Available at: <http://demoniche.r-forge.r-project.org/>

SKILLS and LANGUAGES

R, C, python, sage, LaTeX	Fluent in Swedish, English and Spanish
MySQL, QGIS, ArcMap, ArcCatalog	Conversational in French and Portuguese
	Basic Aymara, Bolivian language

WORKSHOPS and SCHOOLS

Groundfish biodiversity workshop, Quebec Centre for Biodiversity Science	10/2013, 3/2014, 9/2014
Modelling Techniques in Ecology Summer School	8/2013
Forest Complexity Modelling Summer School	5/2012, 5/2013, 6/2014
Mixed Models Workshop, Forest Complexity Modelling program, UQAM	9/2012
Individual- and Agent-Based Modelling Workshop, University of Dresden	6/2012
Community Phylogenetics Workshop, Quebec Centre for Biodiversity Science	10/2011, 12/2012
Dynamical Models in Life Sciences, Summer School, Portugal	7/2011