

Naia Morueta-Holme



Personal data	Born December 24 th 1985, Barcelona (Spain) Citizen of Spain and Denmark
Work address	Department of Bioscience, Aarhus University, Ny Munkegade 114, 8000 Aarhus, Denmark – tel (+45) 87154316 – email: morueta.holme@biology.au.dk
Education	Aug 2008 – PhD student in parallel to Honors MSc program, Biology, Aarhus University - Supervisors: Prof. Jens-Chr. Svenning, Prof. Henrik Balslev & Dr. Richard Condit - Thesis submitted: December 9 th 2013 2008 – 2011 Honors MSc Biology, Aarhus University. Mean 11.6 on the 7-point scale 2005 – 2008 BSc Biology, Copenhagen University. Mean 11.5 for courses and 12 for BSc project on the 7-point scale Spring 2005 English studies at University of Central Lancashire, Preston, England Fall 2004 French studies at Institution Jeanne d'Arc, Vitré, France 2001 – 2004 Matematisk Studentereksamen, Sorø Akademis Skole (highschool). Mean 10.3 on the 13-point scale 2000 – 2001 Primary school in Sorø (Denmark) 1990 – 2000 Primary school in Barcelona (Spain)
Relevant positions	2011 – 2012 News editor of the Danish web portal on evolution, www.evolution.dk 2009 – 2010 Teaching assistant in "Multivariate Analysis of Biological Data", "Applied Statistics", "Tropical Ecosystems, Management and Development", and "Plants, field course", Aarhus University 2007 Field assistant at Habitat Vision consultancy. National Monitoring and Assessment Programme for the Aquatic and Terrestrial Environment 2005 – 2007 – 2011 and 2012 – 2013 Volunteer at the environmental NGO Forests of the World. Board member
International research networks	2008 – Working group member of the NCEAS Botanical Information and Ecology Network (BIEN)
Research stays	2011 Department of Ecology & Evolutionary Biology. University of Arizona (USA) 5 weeks 2010 Department of Ecology & Evolutionary Biology. University of Arizona (USA) 7 weeks 2010 – 2011 Center for Tropical Forest Science. Smithsonian Tropical Research Institute (Panama) 9 weeks
Honors & awards	2011 EliteForsk travel award (300.000 DKK)
Research grants	2012 Fiedlers Fond travel grant (13.800 DKK) 2010 Aarhus University Research Foundation travel grant (42.000 DKK) Etatsraad C.G. Filtenborg's travel grant (10.000 DKK) Finn Ejlersens Mindefond travel grant (7.500 DKK)

Manuscripts reviewed	2012 – PloS One
	2010 – Global Ecology and Biogeography
Field work	2013 Field work in Peru (4 weeks) as part of the Andes to Amazon transect project GEM-CHAMBASA lead by Yadvinder Malhi, Brian Enquist and Greg Asner
	2012 Leading field work in Ecuador (4 weeks) for assessing potential vegetation changes on Chimborazo the past 210 years
	2009 Field work in Colombia (4 weeks) as part of the PALMS project lead by prof. Henrik Balslev financed by the 7 th EU Framework Programme
Publications	<p>Morueta-Holme N, Enquist B, McGill BJ, Boyle B, Jørgensen PM, Ott JE, Peet BK, Šímová I, Sloat L, Thiers B, Violle C, Wiser S, Dolins S, Donoghue II JC, Kraft NJB, Regetz J, Schildhauer M, Spencer N, Svenning JC (2013) Habitat area and climate variability determine geographic variation in plant species range sizes across the New World. <i>Ecology Letters</i> 16: 1446-1454</p> <p>Farji-Brener AG, Morueta-Holme N, Chinchilla F, Willink B, Ocampo N, Bruner G (2012) Leaf-cutting ants as road engineers: the width of trails at branching points in <i>Atta cephalotes</i>. <i>Insect Soc</i> 59: 389-394. doi:10.1007/s00040-012-0231-0</p> <p>Morueta-Holme N, Fløjgaard C, Svenning JC (2010) Climate change risks and conservation implications for a threatened small-range mammal species. <i>PLoS ONE</i> 5(4): e10360. doi:10.1371/journal.pone.0010360</p> <p>Morueta-Holme N, Normand S, Fløjgaard C, Skov F, Svenning JC (2010) Who comes, who disappears? / Hvad kommer, hvad forsvinder? KFT's konferencemagasin (ed. Lars Moseholm): p. 40-41 (in Danish)</p> <p>Fløjgaard C, Morueta-Holme N, Normand S, Svenning JC, Skov F (2010) A tool for management of nature in change / Værktøj til forvaltning af natur i forandring. KFT's konferencemagasin (ed. Lars Moseholm): p. 42-43 (in Danish)</p> <p>Svenning JC, Fløjgaard C, Morueta-Holme N, Lenoir J, Normand S, Skov F (2009) Big moving day for biodiversity? A macroecological assessment of the scope for assisted colonization as a conservation strategy under global warming. <i>IOP Conf Ser: Earth Environ Sci</i> 8: 012017</p> <p>Fløjgaard C, Morueta-Holme N, Skov F, Madsen AB, Svenning JC (2009) Potential 21st century changes to the mammal fauna of Denmark – implications of climate change, land-use, and invasive species. <i>IOP ConfSer: Earth Environ Sci</i> 8: 012016</p> <p>Lamanna CA, Blonder B, Violle C, Kraft NJB, Sandel B, Šímová I, Donoghue II JC, Svenning JC, McGill BJ, Boyle B, Dolins S, Jørgensen PM, Marcuse-Kubitza A, Morueta-Holme N, Peet RK, Piel W, Regetz J, Schildhauer M, Spencer N, Thiers BM, Wiser SK, Enquist BJ (in review in <i>PNAS</i>) The latitudinal species richness gradient does not arise from a larger functional trait space in the tropics</p> <p>Blonder B, Nogués-Bravo D, Borregaard M, Donoghue II JC, Jørgensen PM, Kraft NJB, Lessard JP, Morueta-Holme N, Sandel B, Svenning J-C, Violle C, Rahbek C, Enquist BJ (in review in <i>Ecology Letters</i>) Assembly of communities in climate space.</p> <p>Šímová I, Violle C, Kraft NJB, Storch D, Svenning JC, Boyle B, Donoghue II JC, Jørgensen PM, McGill BJ, Morueta-Holme N, Peet RK, Wiser S, Piel WH, Regetz J, Schildhauer M, Spencer N, Thiers BM, Enquist BJ (submitted to <i>Ecography</i>) Shifts in trait means and variances in North American tree assemblages: species richness patterns are loosely related to the functional space.</p> <p>Morueta-Holme N, Sandel B, McGill BJ, Jørgensen PM, Kraft NJB, Ott JE, Peet RK, Šímová I, Violle C, Donoghue II JC, Enquist BJ, Svenning JC (in prep) Geographic variation in the factors controlling plant species ranges across the New World. [Status: writing]</p> <p>Morueta-Holme N, Engemann-Jensen K, Sandoval-Acuña P, Jonas JD, Svenning JC (in prep) In the footsteps of Humboldt – elevation shifts of Chimborazo's vegetation over 210 years. [Status: writing]</p>

Morueta-Holme N, Blonder B, Ott JE, Sandel B, Svenning JC et al (in prep) Predicting community assembly using species association networks. [Status: writing]

Donoghue II JC, **Morueta-Holme N**, Boyle B, Sloat L, Enquist B, McGill B, Svenning JC et al (in prep) How to best measure the fundamental unit of biogeography [Status: writing]

Enquist BJ, Boyle B, Sandel B, Donoghue II JC, Regetz J, Šimová I, Svenning JC, McGill BJ, Peet RK, Jørgensen PM, Condit R, Smith S, Hinchliff CE, Thiers B, Spencer N, Violle C, Wiser SK, Dolins S, Marcuse-Kubitza A, Kraft NJB, Narro ML, Ott JE, Sloat L, **Morueta-Holme N**, Schildhauer M (in prep) 'Big Data' meets Darwin's "entangled bank": The informatics of life's complexity and the macroecology of botanical diversity. [Status: writing]

Enquist BJ, Boyle B, Donoghue II JC, Thiers BM, Jørgensen PM, McGill BJ, Svenning JC, Condit R, **Morueta-Holme N**, Sloat L et al (in prep) The commonness and distribution of rarity: Quantifying the botanical diversity of all plant species in the Americas. [Status: writing]

Engemann-Jensen K, **Morueta-Holme N**, Dobrin B, Enquist BJ, Svenning JC et al (in prep) Correlation of plant growth form, diversity and climate. [Status: writing]

Engemann K, Svenning J-C, Sandel B, Enquist BJ, Morueta-Holme N et al (in prep) Sample size effects on species richness patterns in a tropical biodiversity hotspot. [Status: writing]

Morueta-Holme N, Svenning JC, Condit R, Enquist B, et al (in prep) Relative roles of water and energy as determinants of plant species distributions across the Panama land bridge. [Status: analysing]

Nieto-Lugilde D, **Morueta-Holme N**, Sandel B, Tsirogianis C, Svenning JC (in prep) Accounting for dispersal barriers in spatial filters for species distribution models. [Status: analysing]

Moreno-Amat E, Mateo RG, Nieto-Lugilde D, **Morueta-Holme N**, Alberdi I, García-Amorena I, Svenning JC (in prep) Evaluating Maxent with paleorecords to inform model calibration and improve predictions across time. [Status: analysing]

Conference presentations

Morueta-Holme N, Sandel B, Simova I, McGill B, Boyle B, Condit R, Dolins S, Donoghue II JC, Enquist B, Jørgensen P, Kraft NJB, Marcuse-Kubitza A, Ott J, Piel W, Peet RK, Regetz J, Schildhauer M, Spencer N, Thiers B, Violle C, Wiser S, Svenning JC (2013) Geographic variation in the relative importance of range-limiting factors for the New World flora. *11th INTECOL Congress, Ecology: Into the next 100 years*, London, United Kingdom

Moreno-Amat E, Mateo RG, Nieto-Lugilde D, **Morueta-Holme N**, Alberdi I, García-Amorena I, Svenning JC (2013) Aplicación de la Paleoecología en la reducción de las incertidumbres de los modelos de distribución de especies en la Península Ibérica. *XI Congreso Nacional de la Asociación Española de Ecología Terrestre*, Pamplona-Iruña, Spain

Morueta-Holme N, Enquist B, McGill BJ, Boyle B, Jørgensen PM, Ott JE, Peet RK, Simova I, Sloat L, Thiers B, Violle C, Wiser S, Dolins S, Donoghue II JC, Kraft NJB, Regetz J, Schildhauer M, Spencer N, Svenning JC (2013) Climate variability and area determine geographic variation in plant species range sizes across two continents. *7th Annual Meeting of the Specialist Group on Macroecology of the Gesellschaft für Ökologie*, Göttingen, Germany

Morueta-Holme N, Engemann-Jensen K, Sandoval-Acuña P, Jonas JD, Svenning JC (2013) In the footsteps of Humboldt – elevation shifts of Chimborazo's vegetation over 210 years. *International Biogeography Society 6th Biennial Meeting*, Miami, Florida, USA

Donoghue II JC, **Morueta-Holme N**, Boyle B, Sloat LL, Enquist BJ, McGill BJ, Svenning JC, the BIEN Working Group (2013) Quantifying the fundamental unit of biogeography: assessing different methods to measure geographic range size and why it matters (Poster). *International Biogeography Society 6th Biennial Meeting*, Miami, Florida, USA

Engemann-Jensen K, **Morueta-Holme N**, Dobrin B, Enquist BJ, Svenning JC (2013) Correlation of plant growth form, diversity and climate (Poster). *International Biogeography Society 6th Biennial Meeting*, Miami, Florida, USA

Enquist BJ, Boyle B, Donoghue II JC, Thiers BM, Jørgensen PM, McGill BJ, Svenning JC, Condit R, **Morueta-Holme N**, Sloat L, Peet RK, the BIEN Working Group (2013) The commonness and distribution of rarity: Quantifying the botanical diversity of all plant species in the Americas. *International Biogeography Society 6th Biennial Meeting*, Miami, Florida, USA

Blonder B, Nogués-Bravo D, Rahbek C, Enquist BJ, Boyle B, Donoghue II JC, Condit R, Peet RK, Dolins S, Schildhauer M, Thiers BM, McGill BJ, Jørgensen PM, Narro M, Regetz J, Violle C, Simova I, Sloat L, Piel W, Kraft NJB, Svenning JC, **Morueta-Holme N**, Spencer N, Wiser SK, Ott JE, Dobrin B, Andelmann S, Engemann-Jensen K (2013) Assembly of plant communities in climate space (Poster). *International Biogeography Society 6th Biennial Meeting*, Miami, Florida, USA

Morueta-Holme N, Enquist BJ, McGill BJ, Svenning JC (2012) Patterns and processes behind the range size distributions of the New World plants. *ESA 7th Annual Meeting*, Portland, Oregon, USA

Enquist BJ, Boyle B, Donoghue II JC, Thiers BM, Jørgensen PM, McGill BJ, Svenning JC, Condit R, **Morueta-Holme N**, Sloat L, the BIEN Working Group (2012) The commonness and distribution of rarity: Quantifying the botanical diversity of all plant species in the Americas. *ESA 7th Annual Meeting*, Portland, Oregon, USA

Morueta-Holme N (2011) The role of long-term dispersal history for species distributions. *12th EEF Congress*, Ávila, Spain

Fløjgaard C, **Morueta-Holme N**, Skov F, Madsen AB, Svenning JC (2009) Potential 21st century changes to the mammal fauna of Denmark (Poster). *7th Annual GBIF Science Symposium*, Copenhagen, Denmark

Morueta-Holme N, Fløjgaard C, Svenning JC (2009) Climate change risks and conservation possibilities for a threatened European endemic mammal (Iberian desman, *Galemys pyrenaicus*) (Poster). *Beyond Kyoto*, Aarhus, Denmark

- Selected guest talks**
- "Patterns and processes behind the range size distribution of the New World plants", Biogeography and Macroecology course, Aarhus University, Denmark, 30.08.2013
 - "Plant range sizes in the New World & the chase of Humboldt up Chimborazo", Environmental Change Institute, Oxford University, United Kingdom, 27.08.2013
 - "Geographic variation in range limiting factors of the New World flora", Enquist & Harte lab meeting, Rocky Mountain Biological Laboratory, Colorado, USA, 17.07.2013
 - "In the footsteps of Humboldt – elevation shifts of Chimborazo's vegetation over 210 years", Integrative Ecology & Evolution Mini-Symposium, Aarhus University, Denmark, 05.02.2013
 - "Patterns and processes behind the range size distribution of the New World plants", Biogeography and Macroecology course, Aarhus University, Denmark, 30.08.2012
 - "Patterns and processes behind the range size distribution of the New World plants", Integrative Biology, UC Berkeley, USA, 03.05.2012
 - "Patterns and processes behind the range size distribution of the New World plants", Department of Global Ecology, Carnegie Institution for Science, Stanford, USA, 04.05.2012
 - "Determinants of plant species distributions – relative roles of climate, soil & dispersal history", Biogeography and Macroecology course, Aarhus University, 02.09.2011
 - "Inferring the role of history in biogeography", Center for Tropical Paleocology and Archaeology, Smithsonian Tropical Research Institute, Panama, 02.12.2010
 - "An introduction to species distribution modelling : with examples from a singular creature", Department of Ecology & Evolutionary Biology, University of Arizona, Tucson, USA, 03.11.2010

Public outreach	<p>"Kan man forudsige fremtidens natur? Klimaændringernes konsekvenser for flora og fauna", Folkeuniversitetet, Denmark, 08.11.2012</p> <p>"Nature in a warmer world – how to predict the future in biology", Tucson high school, Tucson, USA, 31.10.2011</p> <p>"Naturen i en varmere verden - hvordan laver man fremtidsforskning i biologi?", Det Rullende Universitet, Gymnasierne, Erhvervsskolerne Aars, Denmark, 22.04.2010</p> <p>"Naturen i en varmere verden - hvordan laver man fremtidsforskning i biologi?", Det Rullende Universitet, Tørring Gymnasium, Denmark, 16.04.2010</p> <p>"GIS, Biodiversitet og Klimaændringer", Biologilærerday, Aarhus University, Denmark, 07.11.2008</p>
Appearance in mass media	<p>"Danske forskere kortlægger Amerikas sjældne planter", videnskab.dk, 18.10.2013</p> <p>"World's first mapping of America's rare plants", sciencedaily.com, nytimes.com, earthsky.org, and others, 17.10.2013</p> <p>"I Humboldts fodspor", radio documentary, Videnskabens Verden, DR P1, 29.01.2013</p> <p>"Tvangsflytning skal redde den iberiske desman", videnskab.dk, 3.12.2010</p> <p>"Il trasloco del desman, profugo ambientale assistito dell'estinzione da global warming", greenreport.it, 10.5.2010</p> <p>"Climate change and conservation of the Pyrenean desman", suite101.com, 1.5.2010</p>
Language skills	<p>Fluent in conversing, reading and writing Danish, Spanish, English and Catalan</p> <p>Advanced level in oral and written French and oral Norwegian</p>
Interests	<p>My research interests span through general ecology, but especially on what drives diversity patterns and the distribution of species at the macroecological scale. I use ecoinformatic approaches to discern the effects of climate and other factors on biodiversity to improve predictions of the consequences of future environmental change. In the future, I wish to focus on how we can use this knowledge for science-based biodiversity conservation in practice, bringing together my scientific background and my experience from eight years of involvement at an environmental NGO.</p> <p>Besides my research and volunteer work, I have a strong music interest, having played classical piano for many years, and previously played the saxophone in a funk and jazz band. In addition, I enjoy hiking, rock climbing, dancing tango, travelling and getting to know foreign languages and cultures.</p>