

# Marco D. Visser

*PhD candidate at Radboud University Nijmegen*

## Research experience

Since 2011	PhD candidate (Apr 2011 - present) at Institute for Water and Wetland Research, Plant Ecology Group, Radboud University Nijmegen (The Netherlands). Predoctoral Fellow (Apr 2010 - present) at the Smithsonian Tropical Research Institute, Gamboa (Panama).
2009 - 2010	Junior researcher (Sept 2009 - Feb 2010) at the Department of Experimental Plant Ecology, Radboud University Nijmegen (The Netherlands).
2008-2009	Short-term Fellow (Oct 2008 - Feb 2009) at the Smithsonian Tropical Research Institute, Barro Colorado Island (Panama). MSc. Thesis research (2008-2009) at the Smithsonian Tropical Research Institute, Barro Colorado Island, Panama. MSc. Thesis research (2008-2009) at the unit Mathematical and Statistical Methods of Wageningen University.
2007	B.A. Thesis research (2007) at the Forest Research Institute Malaysia, Pasoh Forest Reserve, Malaysia.
2005	Internship (2005) at the Forest Research Institute Malaysia, Kepong, Malaysia.
2004	Internship (2004) at the Mammal Research Institute, Polish Academy of Sciences, Bialowieza, Poland.
2003	Volunteer (2003) at the Mammal Research Institute, Polish Academy of Sciences, Bialowieza, Poland.

## Education

September, 2009	Wageningen University and research centre, M.Sc. (cum laude, highest distinction at WU).  Forestry and Nature Conservation, with a minor in Mathematics and Statistical Methods.
September, 2007	Larenstein University of Applied Sciences, B.A.  Forestry and Nature Conservation, with specialization in Tropical Forestry.

## Publications (inc. submitted/ in preparation)

2011	<b>1. M. D. Visser</b> , E. Jongejans, M. van Breugel, P. A. Zuidema, Y. Chen, A. R. Kassim, H. de Kroon. 2011. Strict mast fruiting for a tropical dipterocarp tree: A demographic cost-benefit analysis of delayed reproduction and seed predation. <i>Journal of Ecology</i> . 99, 1033-1044. <b>2. M. D. Visser</b> , S. Joseph Wright, Helene C. Muller-Landau, Gemma Rutten and Patrick A. Jansen. Tri-trophic interactions affect density dependence of seed fate in a tropical forest palm. 2011, <i>Ecology Letters</i> . 14, 1093-1100.
2012	<b>3.</b> B. van Putten, <b>M. D. Visser</b> , P. A. Jansen and H. C. Muller-Landau. Distorted-distance models for directional dispersal: a general framework and its application to a wind-dispersed tropical forest trees. <i>Methods in Ecology and Evolution</i> . 2012. <b>4.</b> B. T. Hirsch, <b>M. D. Visser</b> , R. Kays and P. A. Jansen. Quantifying seed dispersal kernels from truncated seed-tracking data. <i>Methods in Ecology and Evolution</i> . 2012
2013	<b>5. M. D. Visser</b> . aprof: Amdahl's profiler, directed optimization made easy. R package version 0.1 - 0.2.5. <a href="http://cran.r-project.org/web/packages/aprof/index.html">http://cran.r-project.org/web/packages/aprof/index.html</a> . 2013.
2014	<b>6.</b> P. A. Jansen, <b>M. D. Visser</b> , S. J. Wright, G. Rutten, H. C. Muller-Landau. Negative density-dependence of seed dispersal and seedling recruitment in a Neotropical palm. <i>Ecology Letters</i> 17: 1111–1120. 2014.
2015	<b>7. M. D. Visser</b> , S. M. McMahon, C. Merow, P. M. Dixon, S. Record and E. Jongejans. Speeding Up Ecological and Evolutionary Computations in R; Essentials of High Performance Computing for Biologists. <i>PLoS Comput Biol</i> 11(3): e1004140. doi:10.1371/journal.pcbi.1004140. 2015.
In press	<b>8. M. D. Visser</b> , M. Bruijning, S. J. Wright, H. C. Muller-Landau, E. Jongejans, L. S. Comita and H. de Kroon. Functional traits as predictors of vital rates across the life-cycle of tropical trees. <i>Functional Ecology</i> .
In revision	<b>9.</b> M. Bruijning, <b>M. D. Visser</b> , H. C. Muller-Landau, S. J. Wright, L. S. Comita, S. P. Hubbell, H. de Kroon, E. Jongejans. Surviving in a cosexual world: a cost-benefit analysis of dioecy in tropical trees. Major revision. <i>American Naturalist</i> .
In prep	<b>10. M. D. Visser</b> , S. Joseph Wright, Helene C. Muller-Landau, Eelke Jongejans, Liza S. Comita, Hans de Kroon and Stefan Schnitzer. Differential effects of lianas on population growth rates of tropical forest trees. In prep for <i>Ecology Letters</i> . <b>11. M. D. Visser</b> , S. Joseph Wright, Helene C. Muller-Landau, Gemma Rutten and Patrick A. Jansen. Constraints on the performance of a common tropical palm:
an integral projection	<b>12. M. D. Visser</b> , Helene C. Muller-Landau, Eelke Jongejans, Liza S. Comita, Hans de Kroon and S. Joseph Wright. Principal drivers of tropical tree

model of population dynamics. In prep for Ecology.

density  
dependence. In  
preparation for  
Ecology Letters.

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## About my research

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| 2015 | <ul style="list-style-type: none"><li>• <b>Salguero-Gómez, R</b> (2015). Demography to infinity and beyond! Journal of Ecology blog.<br/><a href="https://jecologyblog.wordpress.com/2015/04/09/demography-to-infinity-and-beyond/">https://jecologyblog.wordpress.com/2015/04/09/demography-to-infinity-and-beyond/</a></li><li>• <b>Wang, I</b> (2015). Recommendation F1000 prime.<br/><a href="http://f1000.com/prime/725405210">http://f1000.com/prime/725405210</a></li></ul>  |
| 2011 | <ul style="list-style-type: none"><li>• <b>Sugden AM</b> (2011) Science Editors' choice. Ecology. The Enemy of My Enemy is my? Science 334:569.</li><li>• <b>Sugden AM</b> (2011) Science Editors' choice. Ecology. Why trees skip a year. Science 333:386</li><li>• <b>Rees M</b> (2011) Editor's Choice: Volume 99, Issue 4 (July). Journal of Ecology.</li><li>• <b>King, B</b> (2011), The enemy of my enemy is my friend. Smithsonian Tropical Research Institute News 1:2</li><li>• <b>Ecological Society of America</b> - young plant population ecologist of the month (October 2011). Featured work: M. D. Visser et al, 2011, Ecology Letters.</li><li>• <b>Kouwen M</b> (2011) Mastjaar overtreft jaarlijkse zaadzetting. Bionieuws 13:6.</li></ul> |

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## Grants and awards

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| 2011 | <ul style="list-style-type: none"><li>• <b>Grant:</b> NWO-ALW, What maintains the diversity of tropical tree species? Unravelling the importance of niche and neutrality with a life cycle approach. Co-wrote with Hans de Kroon, Helene Muller-Landau, Eelke Jongejans, S. J. Wright, P.A. Zuidema, P.A. Jansen and S. Tuljapurkar (230k).</li></ul> |
| 2009 | <ul style="list-style-type: none"><li>• <b>Award:</b> WUF-KLV thesis prize for the best thesis in the life sciences from Wageningen University awarded for my MSc thesis: Density-dependent dispersal and seed predation in a Neotropical palm.</li></ul>   |
| 2008 | <ul style="list-style-type: none"><li>• <b>Grant:</b> Smithsonian Tropical Research Institute, short term fellowship awarded for the study: Quantifying density-dependent responses of seed predators in the Neotropical palm <i>Attalea butyracea</i>. (\$ 5k).</li></ul>  |

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## International presentations

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| 2015  | <p><b>Workshop</b> at the Evolutionary Demography Society Annual Meeting. October 2015, Luntenen. Speeding Up Ecological and Evolutionary Computations in R; Essentials of High Performance Computing for Biologists. Organizer.</p> <p><b>Speaker</b> at the at the Ecological Society of America Annual Meeting 2015. August 2015, Baltimore. Differential effects of lianas on population growth rates of tropical forest trees.</p> <p><b>Workshop</b> at the at the Ecological Society of America Annual Meeting 2015. August 2015, Baltimore. Demography in a Continuous World: New Advances in Integral Projection Models (IPMs). Co-organizer.</p> <p><b>Workshop</b> at the at the British Ecological Society Symposium "Demography Beyond The Population". March 2015, Sheffield. Speeding Up Ecological and Evolutionary Computations in R; Essentials of High Performance Computing for Biologists.</p> <p><b>Speaker</b> at the British Ecological Society Symposium "Demography Beyond The Population". March 2015, Sheffield. Differential effects of lianas on population growth rates of tropical forest trees.</p> |
| 2014  | <p><b>Short Workshop</b> at the Yale School of Forestry &amp; Environmental Studies. December 2014, New Haven. Speeding Up Ecological and Evolutionary Computations in R; Essentials of High Performance Computing for Biologists.</p>   |
| 2012: | <p><b>Invited speaker</b> at the conference "Everything disperses to Miami", December 14 - December 16, 2012, the University of Miami. The fitness consequences of dispersal for a tropical palm; the role of dispersers, natural enemies and negative density dependence.</p> <p><b>Invited speaker</b> at the Max Planck Institute for Demographic Research, workshop on Integral Projection Models, Rostock Germany. June 2012. A Blueprint for speeding-up calculations in R.</p> <p><b>Speaker</b> at the Netherlands Annual Ecology Meeting. February 2012. Quantifying dispersal kernels through inverse modeling.</p>  |
| 2010  | <p><b>Invited speaker</b> at the 5th International Symposium-Workshop on Frugivores and Seed Dispersal. Montpellier, France. June 2010. Measuring dispersal kernels through inverse modeling: density dependence of seed dispersal in a Neotropical palm.</p> <p><b>Speaker</b> at Plant Population Biology: Crossing Borders. Gfo-conference, Nijmegen, Netherlands. May 2010. Strict mast fruiting for a tropical dipterocarp tree: a demographic cost-benefit analysis</p>  |
| 2009  | <p><b>Oral presentation</b> at the Smithsonian Tropical Research Institute. Panama. December 2009. Density-dependent dispersal and seed predation in a Neotropical palm.</p>   |

2008	<b>Oral presentation</b> at the workshop on stochastic elasticity and matrix modeling. Nijmegen, the Netherlands, June 2008. Strict masting in the tropical tree species <i>Shorea leprosula</i> : demographic consequences and evolutionary benefit of predator satiation.
2007	<b>Oral presentation</b> at the International workshop in Matrix models of plant populations. Sogndal, Norway, June 2007. Demographic consequences of strict masting for two tropical tree species <i>Shorea leprosula</i> and <i>Shorea parvifolia</i> .

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### Reviewer for scientific journals

Biotropica, Canadian Journal of Forest Research, Ecology, Ecology and Evolution, Ecology Letters, Journal of Biogeography, Journal of Ecology, Methods in Ecology and Evolution, PLOS computational biology, The R Journal.

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