Marco D. Visser

PhD candidate at Radboud University Nijmegen

Research experience

Since 2011	Prid 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.

B.A. Thesis research (2007) at the Forest Research Institute Malaysia,

Pasoh Forest Reserve, Malaysia.

Internship (2005) at the Forest Research Institute Malaysia, Kepong, 2005

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

2007

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

Publications (inc. submitted/ in preparation)

2011	1. M. D. Visser, 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. Journal of Ecology. 99,
	1033-1044.
	2. M. D. Visser, S. Joseph Wright, Helene C. Muller-Landau, Gemm

Rutten and Patrick A. Jansen. Tri-trophic interactions affect density dependence of seed fate in a tropical forest palm. 2011, Ecology Letters. 14, 1093-1100.

2012 3. B. van Putten, M. D. Visser, 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. Methods in Ecology and Evolution. 2012.

4. B. T. Hirsch, M. D. Visser, R. Kays and P. A. Jansen. Quantifying seed dispersal kernels from truncated seed-tracking data. Methods in Ecology and Evolution. 2012

5. M. D. Visser. aprof: Amdahl's profiler, directed optimization made 2013 easy. R package version 0.1 - 0.2.5. http://cran.rproject.org/web/packages/aprof/index.html. 2013.

6. P. A. Jansen, M. D. Visser, S. J. Wright, G. Rutten, H. C. Muller-2014 Landau. Negative density-dependence of seed dispersal and seedling recruitment in a Neotropical palm. Ecology Letters 17: 1111-1120. 2014.

2015 7. M. D. Visser, 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. PLoS Comput Biol 11(3): e1004140.

doi:10.1371/journal.pcbi.1004140. 2015.

8. M. D. Visser, M. Bruijning, S. J. Wright, H. C. Muller-Landau, E. In press Jongejans, L. S. Comita and H. de Kroon. Functional traits as predictors

> of vital rates across the life-cycle of tropical trees. Functional Ecology. 9. M. Bruijning, M. D. Visser, 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. American Naturalist.

In prep 10. M. D. Visser, 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 Ecology Letters.

11. M. D. Visser, 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 model of density dependence. In preparation for Ecology Letters.

12. M. D. Visser, Helene C. Muller-Landau, Eelke Jongejans, Liza S. Comita, Hans de Kroon and S. Joseph Wright. Principal drivers of tropical tree population dynamics. In prep for Ecology.

About my research

In revision

Journal of Ecology blog.

https://jecologyblog.wordpress.com/2015/04/09/demography-to-infinity-and-beyond/

- Wang, I (2015). Recommendation F1000 prime.

http://f1000.com/prime/725405210

- 2011 **Sugden AM** (2011) Science Editors' choice. Ecology. The Enemy of My Enemy is my? Science 334:569.
 - Sugden AM (2011) Science Editors' choice. Ecology. Why trees skip a year. Science 333:386
 Rees M (2011) Editor's Choice: Volume 99, Issue 4 (July). Journal of
 - Ecology.
 King, B (2011), The enemy of my enemy is my friend. Smithsonian
 - Tropical Research Institute News 1:2

 Fcological Society of America young plant population ecologist
 - **Ecological Society of America** young plant population ecologist of the month (October 2011). Featured work: M. D. Visser et al, 2011, Ecology Letters.
 - **Kouwen M** (2011) Mastjaar overtreft jaarlijkse zaadzetting. Bionieuws 13:6.

Grants and awards

- **Grant**: 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).

- Award: 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.
 - Grant: Smithsonian Tropical Research Institute, short term

- **Grant**: Smithsonian Tropical Research Institute, short term fellowship awarded for the study: Quantifying density-dependent responses of seed predators in the Neotropical palm Attalea butyracea. (\$ 5k).

International presentations

2015 **Workshop** at the Evolutionary Demography Society Annual Meeting. October 2015, Lunteren. Speeding Up Ecological and Evolutionary Computations in R; Essentials of High Performance Computing for Biologists. Organizer.

Speaker 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.

Workshop 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. Workshop 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.

Speaker 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.

2014 **Short Workshop** at the Yale School of Forestry & Environmental Studies. December 2014, New Haven. Speeding Up Ecological and Evolutionary Computations in R; Essentials of High Performance Computing for Biologists.

2012: Invited speaker 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.

Invited speaker at the Max Planck Intitute for Demographic Research, workshop on Integral Projection Models, Rostock Germany. June 2012. A Blueprint for speeding-up calculations in R.

Speaker at the Netherlands Annual Ecology Meeting. February 2012. Quantifying dispersal kernels through inverse modeling.

2010 Invited speaker 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.

Speaker at Plant Population Biology: Crossing Borders. Gfoconference, Nijmegen, Netherlands. May 2010. Strict mast fruiting for a tropical dipterocarp tree: a demographic cost-benefit analysis **Oral presentation** at the Smithsonian Tropical Research Institute.

2009 **Oral presentation** at the Smithsonian Tropical Research Institute. Panama. December 2009. Density-dependent dispersal and seed predation in a Neotropical palm.

Oral presentation at the workshop on stochastic elasticity and matrix modeling. Nijmegen, the Netherlands, June 2008. Strict masting in the tropical tree species Shorea leprosula: demographic consequences and evolutionary benefit of predator satiation.
 Oral presentation at the International workshop in Matrix models

Oral presentation at the International workshop in Matrix models of plant populations. Sogndal, Norway, June 2007. Demographic consequences of strict masting for two tropical tree species Shorea leprosula and Shorea parvifolia.

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.