Marco D. Visser

Postdocorial researcher at Princeton University, Visiting address: 100 Eno Hall Princeton, NJ 08540, United States. mvisser@princeton.edu - marco.d.visser@gmail.com

https://github.com/MarcoDVisser

Research experience

Postdocorial researcher (Nov 2016 - Present) at Department of 2016 Ecology and Evolutionary Biology, Princeton University (USA). PhD candidate (Apr 2011 - Sep 2016) at Institute for Water and 2011 - 2016 Wetland Research, Plant Ecology Group, Radboud University Nijmegen (The Netherlands) Predoctoral Fellow (Apr 2010 - Apr 2011) at the Smithsonian Tropical Research Institute, Gamboa (Panama). Junior researcher (Sept 2009 - Feb 2010) at the Department of Experimental Plant Ecology, Radboud University Nijmegen (The Netherlands). 2009 - 2010 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 Research, Malaysia. Internship (2005) at the Forest Research Institute Malaysia, Kepong, Malaysia. Internship (2004) at the Mammal Research Institute, Polish Academy of Sciences, Bialowieza, Poland. Volunteer (2003) at the Mammal Research Institute, Polish Academy of Sciences, Bialowieza, Poland. 2008-2009 Short-term Fellow (Oct 2008 - Feb 2009) at the Smithsonian Tropical 2007 2005 2004

Education

November, 2016 Radboud University Nijmegen, PhD (cum laude, highest distinction at RU). RU). 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. Larenstein University of Applied Sciences, B.A. Forestry and Nature Conservation, with specialization in Tropical Forestry. September, 2009

September 2007

Publications (inc. submitted/ in preparation)

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, Gemma 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.

3. B. van Putten, M. D. Visser, P. A. Jansen and H. C. Muller-Landau. Distorter-distance models for directional dispersal: a general. 2012

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

Secology and Evolution. 2012

5. M. D. Visser. aprof. Amdahl's profiler, directed optimization made easy. R package version 0.1 - 0.3.1. http://cran.r-2013

project.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.

2014.
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. 2015

2016

2017

2015.

8. M. D. Visser, 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. 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. 189:297-314. American Naturalist.

10. M. Bruijning, Marco D. Visser, C. A. Hallmann, E. Jongejans. trackdem: Particle Tracking and Demography. R package version 0.1. https://cran.pr-project.org/package=trackdem 2017.

11. M. D. Visser, S. Joseph Wright, Helene C. Muller-Landau, Eelke Jongejans, Liza S. Comita, Hans de Kroon and Stefan Schnitzer. Tree species vary widely in their tolerance for liana infestation: A case study of differential host response to generalist parasites. Journal of Ecology.

Scudy of differential host response to generalist parasites, journal of Ecology.

12. E.J. Francis, H.C. Muller-Landau, S.J. Wright, M. D. Visser, Y. Iida, A.R. Kassim, C. Fletcher, and S.P. Hubbell. Re-evaluating the functional significance of wood density for interspecific variation in growth and survival in tropical trees. Global Ecology and Biogeography In review

Biogeography

12. 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.

13. M. D. Visser, Helene C. Muller-Landau, Eelke Jongejans, Liza S.

M. D. Visser, Helene C. Muller-Landau, Eelke Jongejans, Liza Comita, Hans de Kroon and S. Joseph Wright. Explaining variation among tree species in liana infestation. In prep for Ecology.
 M. B. Bruijning, M. D. Visser, C. A. Hallmann, E. Jongejans. Automated particle tracking to obtain population counts and size distributions from videos in R. In prep for Methods in Ecology and Evolution.

15. M. D. Visser, Helene C. Muller-Landau, Eelke Jongejans, Liza S. Comita, Hans de Kroon and S. Joseph Wright. The comparative demography of tropical trees. In prep for Ecology.

About my research

In prep

Chisholm R. F1000Prime Recommendation of [Visser MD et al., PLoS Comput Biol 2015, 11(3):e1004140]. In F1000Prime, 21 Jul 2016; DOI: 10.3410/f.725405210.793520972. F1000Prime.com/725405210#eval793520972 Salguero-Gómez, R. Demography to infinity and beyond! Journal of

2015

Ecology blog.

g. ogyblog.wordpress.com/2015/04/09/demography-to-

https://jecologyblog.wordpress.com/2015/04/09/demography-to-infinity-and-beyond/
Wang I. F1000Prime Recommendation of [Visser MD et al., PLoS Comput Biol 2015, 11(3):e1004140]. In F1000Prime, 28 Jul 2015; DOI: 10.3410/f.725405210.793508140.
F1000Prime.com/725405210#eval793508140
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 wars. Science 333:366. 2011

year. Science 333:386
Rees M (2011) Editor's Choice: Volume 99, Issue 4 (July). Journal of

King, B (2011), The enemy of my enemy is my friend. Smithsonian Tropical Research Institute News 1:2

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

2011

2009

2008

2014

2010

2009

2008

2007

 Grant: Academy Ecology Fund. Royal Dutch Academy of Sciences (KNAW), Quantifying the effects of extreme years on tropical tree dynamics: capitalizing a rare El Niño occurrence (6k). 2016

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 fellowship awarded for the study: Quantifying density-dependent responses of seed predators in the Neotropical palm Attalea butyracea. (\$ 5k).

International presentations

2015

Speaker at the at the Association for Tropical Biology and Conservation Annual Meeting 2016. June 2016, Montpellier, France. Population-level effects of hunting on dispersal, seed predation and population abundance in the Neotropical palm Attalea butyracea. Workshop at the British Ecological Society Annual Meeting. December 2015, Edinburgh. Speeding Up Ecological and Evolutionary Computations in R; Essentials of High Performance Computing for Biologists. Organizer. 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.

Biologists. Organizer.

Speaker at the at the Ecological Society of America Annual Meeting

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.

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.
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.
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.
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 ost-benefit analysis
Oral presentation at the Smithsonian Tropical Research Institute. 2012:

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

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 of plant populations. Sogndal, Norway, June 2007. Demographic consequences of strict masting for two tropical tree species Shorea leprosula and Shorea parvifolia.

Reviewer

Scientific Journals: Biotropica, Canadian Journal of Forest Research, Ecology, Ecology and Evolution, Ecology Letters, Ecological Modelling, Journal of Biogeography, Journal of Ecology, Methods in Ecology and Evolution, PLOS computational biology, The R Journal. National Funds for Scientific Research: Research Foundation Flanders (FWO).