Ana Margarida Gracio de Barros

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EDUCATION

2013	PH.D. in Forestry and Natural Resources, Department of Natural Resources, Environment and Territory, University of Lisbon
2008	M.Sc. in Forestry and Natural Resources, Department of Forestry, Technical University of Lisbon
2006	LICENTIATE in Forestry and Natural Resources, Department of Forestry, Technical University of Lisbon

PROFESSIONAL APPOINTMENTS

2017-2018	Research associate, College of Forestry, Oregon State University
2014-2017	Postdoctoral scholar, College of Forestry, Oregon State University
2012-2014	Research fellow, The Navigator Company (ex-Grupo Portucel-Soporcel)

PUBLICATIONS

Refereed Journal Articles

2019	**Barros, A.M.G.**, A.A. Ager, M.A. Day, P. Palaiologou "Improving long-term fuel treatment effectiveness in the National Forest System through quantitative prioritization", *Forest Ecology and Management*, doi:10.1016/j.foreco.2018.10.041
2018	**Barros, A.M.G.**, A.A. Ager, M.A. Day and M. Krawchuk "Wildfires managed for restoration enhance ecological resilience", *Ecosphere*, doi:10.1002/ecs2.2161
2018	Ager, A.A., **A.M.G. Barros**, M.A. Day, H.K. Preisler, T.A. Spies and J. Bolte "Analyzing fine-scale spatiotemporal drivers of wildfire in a forest landscape model", *Ecological Modelling*, doi:10.1016/j.ecolmodel.2018.06.018

2018 Ager, A.A., P. Palaiologou, C. Evers, M.A. Day and **A.M.G. Barros** "Transboundary wildfire risk: Concepts and case study from the southwestern US", *Risk Analysis*, doi:10.1111/risa.12999

2017 Ager, A.A., **A.M.G Barros**, H.K. Preisler, M.A. Day, T.A. Spies, J. Bailey, J. Bolte "Effects of accelerated wildfire on future fire regimes and implications for US federal fire policy", *Ecology & Society*, doi:10.5751/ ES-09680-220412

2017 Panisset, J., C. DaCamara, R. Libonati, L.F. Peres, T. Calado, **A.M.G. Barros**"Assigning dates and identifying areas affected by fires in Portugal based on MODIS data", *Anais da Academia Brasileira de Ciencias*, doi:10.1590/0001-3765201720160707

2017 Mirra, I., T. M. Oliveira, **A.M.G. Barros**, P.M. Fernandes, "Fuel dynamics following fire hazard reduction treatments in blue gum Eucalyptus globulus plantations in Portugal", *Forest Ecology and Management*, doi:10.1016/j.foreco.2017.05.016

2017 Ager, A.A., C.R. Evers, M.A. Day, H.K. Preisler, **A.M.G. Barros**, M. Nielsen-Pincus, "Network analysis of wildfire transmission and implications for risk governance", *PLosOne*, doi:10.1371/journal.pone.0172867

2017 **Barros, A.M.G.**, A.A. Ager, M.A. Day, H.K. Preisler, T.A. Spies, E. White, R. Pabst, K. Olsen, E. Platt, J.D. Bailey, J.P. and Bolte, "Spatiotemporal dynamics of simulated wildfire, forest management, and forest succession in central Oregon, USA", *Ecology and Society*, doi:10.5751/ES-08917-220124

2017 Spies, T.A., E. White, J. Bolte, J. Kline, A.A. Ager, E. Platt, K. Olsen, R. Pabst **A.M.G. Barros**, J. Bailey, S. Charnley, J. Koch, A. Morzillo, M. Steen-Adams, J. Sulzman, C. Schwartz, P. Singleton and C. Csuiti "Using an agent-based model to examine alternative futures of fire and ecosystem services in a multi-ownership landscape in Oregon", *Ecology & Society*, doi: 10.5751/ES-08841-220125

2017 Charnley S., T.A. Spies, **A.M.G. Barros**, E. White, and K. Olsen, "Heterogeneity in forest management to reduce wildfire losses: implications for resilience", *Ecology & Society*,doi:10.5751/ES-08753-220122

2016 Fernandes, P.M., **A.M.G. Barros**, A. Pinto and J.A. Santos, "Characteristics and controls of extremely large wildfires in the western Mediterranean Basin", *Journal of Geophysical Research: Biogeosciences*, doi:10.1002/2016JG003389

2016 Fernandes, P.M., T. Monteiro-Henriques, N. Guiomar, C. Loureiro and **A.M.G. Barros** (2016), "Bottom-Up Variables Govern Large Fire Size in Portugal", *Ecossystems*, doi":10.1007/s10021-016-0010-2

2016 Oliveira, T.M., **A.M.G. Barros**, A.A. Ager and P.M. Fernandes, "Assessing the effect of a fuel break network to reduce burnt area and wildfire transmission", *International Journal of Wildland Fire*, doi:10.107/WF15146

2015 Ager, A.A., **A.M.G. Barros** and M.A. Day, "Understanding the transmission of wildfire risk on a fire prone landscape: A case study from Central Oregon", *Geophysical Research Abstracts*, 17:EGU2015-15128

2015 **Barros, A.M.G.**, A.A. Ager, H.K. Preisler, M.A. Day, T. Spies, and J. Bolte,

"Understanding coupled natural and human systems on fire prone landscapes: integrating wildfire simulation into an agent based planning system", *Geophysical Research Abstracts*, 17:EGU2015-11152-11152

2014 **Barros, A.M.G.** and J.M.C. Pereira, "Wildfire selectivity for land cover type: Does size matter?", *PLos ONE*, doi:10.1371/journal.pone.00847.60

2013 Garcia-Portugues, E., **A.M.G. Barros**, R.M. Crujeiras, W. Gonzalez-Manteiga, and J.M.C Pereira, "A test for directional-linear independence, with applications to wildfire orientation and size", *Stochastic Environmental Research and Risk Assessment*, doi:10.1007/S00477-0130819-6

2013 **Barros, A.M.G.**, J.M.C. Pereira, M.A. Moritz, and S.L. Stephens, "Spatial Characterization of wildfire orientation patterns in California", *Forests*, doi:10.3390/f4010197

2012 **Barros, A.M.G.**, J.M.C Pereira, and U.J. Lund, "Identifying geographical patterns of wildfire orientation: A watershed-based analysis", *Forest Ecology and Management*, doi: 10/1016/j.foreco.2011/09/027

Other Publications

2016 Spies, T.A. and **A.M.G. Barros**, "Fuel Treatments: A Landscape and Multi-resource Problem", *Western Forester* 61:1, 7-9

AWARDS AND HONORS

2008 Best Student in the Technical University of Lisbon, Technical University of Lisbon

2006 Best Student in Forestry and Natural Resources, Technical University of Lisbon

GRANTS

2007 Doctoral grant awarded by the Portuguese Foundation for Science and Technology ($65k)

CONFERENCE PARTICIPATION

Papers presented

2018 **Barros, A.M.G.**, A.A. Ager, M.A Day "Success rate of alternative criteria for the prioritization of fuel management in the Deschutes National Forest",*The Fire Continuum Conference*, May 21-24, Missoula MT, USA

2017 **Barros, A.M.G.**, A.A. Ager, M.A Day "Understanding the reliability of alternative wildfire exposure metrics", 2017, *Symposium on Systems Analysis in Forest Resources*, August 27-30, Suquamish WA, USA

2017 **Barros, A.M.G.**, A.A. Ager, M.A. Day, R. Houtman, and J. Abatzoglou "Modeling the long-term effect of forest management on wildfire under alternative climate change scenarios", 2017, *Symposium on Systems Analysis in Forest Resources*, August 27-30, Suquamish WA, USA

2017 **Barros, A.M.G.**, A.A. Ager and M.A. Day "Quantifying the reliability of alternative wildfire exposure metrics through space and time", 2017, *IV International Congress on Risks*, May 23-26, Coimbra, Portugal

2017 **Barros, A.M.G**, A.A. Ager, M.A. Day and H.K. Preisler "Modeling landscape change from alternative wildfire suppression policies", 2017, *US-IALE Annual Meeting*, April, 9-13, Baltimore MD, USA

2016 **Barros, A.M.G**, A.A. Ager and M.A. Day "Simulating the Joint Impacts of Wildfires and Fuel Management on Landscape Resiliency in Central Oregon USA", *5th International Fire Behavior and Fuels Conference*, April 11-15, Portland OR, USA

2016 **Barros, A.M.G.**, A.A. Ager, M.A. Day, H.K. Preisler, J. Abatzoglou and J. Kim "Fire Occurrence Under Climate Change in Central Oregon", 2016, *4th Central Oregon Fire Science Symposium*, March 24-26, Bend OR, USA

2016 **Barros, A.M.G.**, A.A. Ager, M.A. Day, H.K. Preisler, J. Abatzoglou and J. Kim "Wildfire in the Pacific Northwest under climate change"', 2016, *US-IALE Annual Meeting*, April 3-7, Asheville NC, USA

2015 **Barros, A.M.G**, A.A. Ager, M.A. Day and H.K. Preisler "Towards a tipping point for fuel management: implications for forest restoration and wildfire dynamics in a multi-ownership landscape", 2015, *9th Annual IALE World Congress*, Portland OR, USA

2015 **Barros, A.M.G.**, A.A. Ager, H.K. Preisler, M.A. Day, T.A. Spies, and J. Bolte. "Understanding coupled natural and human systems on fire prone landscapes: integrating wildfire simulation into an agent based planning system", 2015 *European Geosciences Union General Assembly*, April 12-17, Vienna, Austria

2013 **Barros, A.M.G.**, T.M. Oliveira, and A.A. Ager "Assessing the impact of fuel uncertainty in the quantification of wildfire exposure", 2013, *IV Fire Behavior and Fuels Conference*, February, 18-22, St. Petersburg, Russia

As a co-author

2017 Houtman, R., A.A Ager, R. Seli and **A.M.G. Barros** "Modeling Long-Term Effects of Fuel Reduction on Fire Severity on the Deschutes National Forest" *The Fire Continuum Conference*, May 21-24, Missoula MT, USA

2017 Ager, A.A., **A.M.G. Barros**, F.J. Alcasena, P. Palaiologou, and C. Evers "A comparison of wildfire risk modeling methods used for mitigation planning in

the USA" *IV International Congress on Risks*, May 23-26, Coimbra, Portugal

2017 Ager, A.A., C. Evers, P. Palaiologou, M.A. Day, and **A.M.G. Barros** "Network analysis of wildfire transmission and implications for risk governance", 2017, *Symposium on Systems Analysis in Forest Resources*, August 27-30, Suquamish WA, USA

2017 Ager, A.A., R.H. Houtman, R. Seli, and **A.M.G. Barros** "Modeling the long-term effects of fuel reduction on fire severity and harvest values on the Deschutes National Forest", 2017, *51st Pacific Northwest Regional Economics Conference: Regions in Transition*, May 23-25, Bend OR, USA

2017 Ager, A.A., R. Seli, R. Houtman, and **A.M.G. Barros** "Modeling the long term impact of large wildfires and forest restoration treatments on western US national forests", 2017 *5thForest Vegetation Simulator (FVS) e-Conference*, February 28 to March 2, web conference

2016 Ager, A.A., R. Seli, **A.M.G. Barros** and R. Houtman "Modeling management to reduce damages from mega-fires", 2016, *3rd Southwest Fire Ecology Conference*, November 28 - December 2, Tucson AZ, USA

2015 Ager, A.A., **A.M.G. Barros**, and M.A. Day. "Understanding the transmission of wildfire risk on a fire prone landscape: A case study from Central Oregon.",2015 *European Geosciences Union General Assembly*, April 12-17, Vienna, Austria

INVITED CAMPUS TALKS

2018 "Addressing forest management challenges with a landscape perspective." - College of Natural Resources, University of California - Berkeley

2017 "Using Envision to model the long-term impacts of restoration and fuel management programs on wildfires." - School of Forestry, Northern Arizona University

2015 "Rural fires in Portugal: Ecology and research." - College of Forestry, Oregon State University

PROFSSIONAL MEMBERSHIPS

Since 2016 Association for Fire Ecology

LANGUAGES

Portuguese, native
English, fluent speaker, reader and writer